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Spokane, Washington 99212

April 1995

Mineral Mountain Timber Sale Environmental Assessment

(OR135-05-10)

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BUREAU OF LAND MANAGEMENT
Spokane District Office
1103 N. Fancher
Spokane, Washington 99212-1275

(509) 536-1200

IN REPLY REFER TO:
5400 (135)

April 5, 1995

Dear Reader:

Enclosed for your review is the Mineral Mountain Timber Sale Environmental Assessment and the Finding of No Significant Impact. This proposal was designed and analyzed by a team of interdisciplinary resource specialists from the Spokane District, Border Resource Area.

On January 5, 1995, a draft version of this timber sale proposal was distributed for a 30 day comment period. The comments submitted on the draft were considered and helped us modify the proposal and analysis. The advertisement of the Mineral Mountain Timber Sale notice should be published later this spring or early summer.

Protests of a forest management decision, such as this, may be made within 15 days of the publication of the timber sale notice which is made in a local newspaper of general circulation such as the Spokesman Review (43 CFR 5003.1-3).

Any comments you have regarding this proposal should be sent to Ann Aldrich, Border Resource Area Manager, Spokane District, 1103 N. Fancher, Spokane, WA 99212-1275, by May 12, 1995.

Sincerely yours,

for Lynne Keeling

Ann B. Aldrich
Border Resource Area Manager

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FINDING OF NO SIGNIFICANT IMPACT (FONSI)/DECISION RECORD

I have reviewed this Environmental Assessment including the explanation and resolution of any potentially significant environmental impacts. I have determined that the proposed action with the mitigation measures described below will not have any significant impacts on the human environment and that an EIS is not required. I have determined that the proposed project is in conformance with the approved land use plan.

Mitigation Measures

1. All shoulders of permanent and temporary roads and landings will be seeded with winter wheat at the rate of 2 pounds per acre. Seeding will be conducted in the fall of the year following construction. This treatment should stabilize banks thus reducing erosion and noxious weed invasion.

2. The areas not currently surveyed for rare plants will be surveyed prior to the commencement of operations under the timber sale contract. If any sensitive species habitats are identified during this survey appropriate measures will be taken. This may include modification of the timber sale proposal.

3. All logging and government vehicles will be cleaned of all loose soil material prior to entering the area in order to reduce noxious weed transport.

Lynne Keeling
Border Resource Area Manager

4/5/95
Date

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I. NEED FOR THE PROPOSAL

The Spokane District Resource Management Plan identified this area as being among the over 41,000 acres of forest land that are to be managed for full timber production (i.e., commercial forest).

Subsequent inventories of the commercial forest land in the Border Resource Area identified resource problems on the Mineral Mountain parcels that need attention in the immediate future. These problems included the following:

Nearly 75% of the area has a heavy infestation of dwarf mistletoe. There are pockets of root rot. Because of the absence of fire over the last 80 years, Douglas fir and grand fir have encroached into areas normally dominated by Ponderosa pine and western larch. There are areas that are over stocked and should be thinned. Individually these factors would not be of major concern, however cumulatively they have resulted in creating a severely stressed forest community.

Another indication of the severity of this condition is the latest outbreak of spruce budworm. Endemic populations of budworm are still present and it is reasonable to assume that populations will again rise and further losses would occur.

SUMMARY INFORMATION

Within the Fifteenmile Creek subwatershed, mineral exploration and associated activities have historically been the main change agent since the 1890's. There are approximately 36 unpatented mining claims that average 20 acres each, with a surface disturbance of about 5 acres total.

Logging activities have affected approximately 75% of the land base over the past 80 years. These activities have created a mosaic of stands that run from fully mature to areas that were logged only recently. In almost all cases the area is covered with different sized stands of timber that represent all age groups.

The surrounding ownership is comprised mostly between the Washington State Department of Natural Resources and the Boise Cascade Corporation. Only two small, private, noncommercial owners are involved in the immediate area.

Timber harvesting would be accomplished using several forms of selective cutting methods. Harvesting methods would be restricted to those systems that offer the lowest residual impacts.

Roads within the sub-watershed are now at 2.5 miles per square mile, and those within the proposed harvest area are at 2.7 miles per square mile. However, since BLM must provide access to private inholdings, some of the roads must be maintained. Therefore another objective of the proposal would be to reduce road densities on the public land. The proposal addresses this issue by proposing to use a combination of barriers and gates, thus reducing useable road densities down below 2.0 miles per square mile.

Table 1. Legal Description of BLM-administered Land for the Mineral Mountain Proposed Action

Township	Range	Section	Sub-Division	Acres
39 N	37 E	24	E½NE¼	80.00
39 N	38 E	17	N½SE¼	80.00
			SW¼SE¼	40.00
			Portion of McKinley Lode and Matchless Lode in the SW¼SW¼	00.25
			SE¼SW¼	40.00
		18	S½SW¼	80.00
		19	N½NE¼	80.00
			SE¼NE¼, E½NW¼ E½SW¼, SE¼ Less MS 802 and Portions of MS 772 and MS 917	246.64
			Lot 5	37.25
		20	NW¼NW¼	40.00
			Lot 1	16.35
			Lot 2	00.01
			Lot 7	3.80
		30	Lot 8	20.20
			Lot 10	27.99
			Lot 12	37.77
		Total		830.26

II. PROPOSED ACTION

Harvest Proposal

The objective of this proposed timber sale is to silviculturally treat the timber stand to promote forest stand health and increment growth while providing marketable forest products. The Mineral Mountain harvest volume is estimated at approximately 2.35 MMBF of commercial timber. This volume would be harvested from 235 acres of the 830 acres of public land in this watershed. Approximately 24% of the standing commercial timber would be harvested from the 830 acres. The proposed sale area would be divided into two types of harvesting units that would both use selective cutting methods.

Partial cut (selective cut) units are those that are of a multi-storied type. These stands were mainly created from past fire events. Within these units there is a high degree of dwarf mistletoe infestation along with scattered root rot pockets. Overcrowded conditions exist in all layers of these units and require thinning.

Partial cut (special yarding) units are those that are of a single story type. These stands are the result of the last major fire event. The major components consist of small average diameter (4" to 6" dbh) overcrowded mixed conifers (+1200 stems/acre). Along with these attributes is a lack of reproduction and understory vegetation. Operations would extend over a 36-month period from the date of the sale.

Specific activities in the proposed action are listed below:

Cutting Practices	Acres
Partial Cut (Selective Cut)	118
Partial Cut (Special Yarding)	105
Permanent Right-of-Way Clearing (50 stations)*	3
Temporary Right-of-Way Clearing (49 stations)*	3
Landings, Skid Trails	6
Total	235

*Note: 1 station = 100 feet

Harvest Volume Estimates

BLM - 2.35 MMBF (90% green and 10% salvage)

Logging Residue Acreage

Lop & Scatter - 223 acres
Pile & Burn - 12 acres

Road and Landing Construction

One new permanent entry road along with two temporary spur roads would be constructed for this proposed action. The permanent road would be 5,100 feet in length. The two temporary spur roads would be 600 and 5,000 feet in length (see Exhibits 3 & 4). All these roads would be built to BLM's minimum road construction standards.

BLM minimum road construction standards are as follows. All roads would be 14 feet in width with

turnouts adding 8 feet in width and 60 feet in length. Road gradients would be 10% or less, but would allow for short 100 foot sections to exceed to 16%.

No surfacing material (rock) would be applied and vegetative removal within the clearing limits would be limited to that which impedes the operating of logging equipment over the 14 foot wide road surface. Roads would be outsloped and ditched with water divergent structures (i.e., culverts), along with water bars or open culverts used where necessary. Clearing limits for this proposed action would be measured from the center line and would be 16 feet at a minimum on the gentle slopes, and 60 feet at maximum on the steeper side slopes. Sideslopes vary from 0% to a maximum of 48%.

All landings (approximately 15) would be located within or adjacent to existing or proposed roads and would not be allowed within 100 ft. of any known cultural site. Locations of landings would be placed in locations that best utilize natural openings, level ground and previously disturbed areas to minimize impacts of vegetative removal during their construction. It is anticipated that the total disturbance created in the construction of landings would not exceed 4 acres total (see Exhibit 5 for approximate landing location).

It is planned that 200 feet of road construction would require excavating and end hauling on temporary spur B (see Exhibit 3). The end hauled material would be stockpiled in an area designated by the Contracting Officer. This material along with any grubbed out stumps and large rocks would be used in the recontouring of the roads that are to be closed.

Those existing roads within and outside the contract area needed for the contract would be reconstructed to BLM's minimum standards. This is needed to allow for the safe operations by the contractor of his equipment over these roads and also to insure the safe passage of all users (see Exhibit 3).

Temporary roads and landings would be recontoured for their total area of disturbance, except temporary spur B. The 200 foot section that would be end hauled will not be fully recontoured due to the geophysical limitations at this section. Both the temporary roads and landings would be scarified and seeded, and logging residues would be distributed over all the disturbed ground to help reduce the impacts from rainfall and runoff.

Rehabilitation

All disturbed soil, except for any road surfaces that remain, would be seeded. All temporary roads and landings would be ripped and seeded following timber sale activities. The seed must meet all requirements of the General Seed Act (7 U.S.C. Secs. 1551-1610 incl.) and the seed laws and noxious weed laws of Washington State. Other seed requirements are as follows:

Germination	minimum percent -	85.0
Purity	minimum percent -	95.0
Weed Content	maximum percent -	0.5

Ratio of Seed to Use
Bluebunch wheatgrass @ 10 lbs/ac.
Sherman big bluegrass @ 5 lbs/ac.
Alsike clover @ 6 lbs/ac.

A urea fertilizer grade of 16-20-0 may be applied at a rate of 100 lbs. per acre if soil tests indicate the need. Seeding would be completed the Fall after logging operations or the next Spring if operations

end too late in the year. Landings, temporary spur roads, and skid trails would be scarified, waterbarred and seeded. Logging residue would be scattered over these areas to promote nutrient cycling and enhance wildlife habitat.

Cutting Practices

Proposed cutting practices are as follows:

Special Yarding Units (Exhibit 5)

SY No. 1	36
SY No. 2	9
SY No. 3	65
Subtotal	105 acres

Selective Cut Units (Exhibit 5)

SC No. 1	35
SC No. 2	18
SC No. 3	40
SC No. 4	12
SC No. 5	13
Subtotal	118 acres

Clearcut R/W - Landing (Exhibit 5)

Right-of-Way	6
Landings 15 x 1/3 acre =	4
Skidtrails	2
Subtotal	12 acres

All Cuttings Total = 235 acres

Silvicultural Treatment

Special Yarding Units

These units are single-storied, with the average height being 50 feet. The two predominant species are Douglas-fir and western larch with lodgepole pine and western red cedar making up most of the secondary species. Stem densities run about 1200-1500 per acre and stem diameters are between 2.5 inches and 20.0 inches, with 7 inches average. Because of the stem densities, ground vegetation is very sparse with large areas underneath the canopy being nearly void of ground vegetation. These units are to use a partial cut method that would emphasize thinning to open up these stands.

The selection of trees to be cut would meet the following conditions: trees must have at least one log 10 feet in length with a minimum top diameter of 3 inches; any tree larger than 17.9 inches would not be cut; trees would first be selected by the amount of dwarf mistletoe and root rot present, then by form (i.e., crookedness and soundness of the bole, having double stems and missing tops); and lastly trees will be selected for spacing to open up the stand with an average spacing of 14 feet as the goal. Except for snags that present a safety hazard to logging operations, all snags would be retained.

Selective cut units

The trees in these units are multi-storied, multi-specied in composition, with an abundance of ground vegetation. They consist of Douglas fir/grand fir type. Crown closure is now 100% with post-harvest closure running between 30% and 50%. No snags would be cut. These units would apply two cutting methods: Free selection and Group selection.

Free selection consists of cutting trees in a manner and intensity that assures the establishment or release of regeneration. Free selection would include the removal of dwarf mistletoe-infected trees having a rating of 4 or more and the removal of selected less vigorous and crowded trees. In the selection of residual trees, the retaining of a multi-layered stand with future snag needs would be emphasized. Less overstory would be removed in areas where there is less reproduction due to severe brush competition. All ponderosa pine and a majority of lodgepole pine and western larch would be retained.

Group selection is a response to Armillaria root rot pockets that are found throughout the sale area. This would entail the creation of small openings by the selection of all the Douglas fir within the perimeter and 50 feet beyond the boundary of the root rot pocket. Post-harvest crown closure would be 30% where non-infected trees are retained. No snags would be cut. All of the remaining uninfected western larch and lodgepole pine in and around the root rot centers would be retained.

Logging Operations

Falling and Bucking

Selective cut units

Falling and bucking (i.e., cutting of trees to specified log lengths) operations would be accomplished by either chain saws or mechanical harvesters (i.e., shears or a rotary cutting head on a tracked vehicle). Stump height would be limited to 12 inches. Directional falling with preplanned yarding corridors would be used. Logs would be delimbed and bucked to length. The resulting logging residue would be spread out over the units. If logging residue becomes a fire danger in some areas, then whole tree skidding would be employed, with the residue being piled at the landings for later burning.

Special Yarding Units

Falling and Bucking would be accomplished with either chain saws or a low ground pressure mechanical harvester. Stump height would be limited to 8 inches. Bucking and delimbing of the harvested logs would be at the stump. Bucking limits would be a minimum of 10 feet and a maximum of 16 feet.

Yarding and Loading

Selective Cut Units

A low ground pressure type of tracked yarder (D5 or the equivalent in size and power) would be utilized. Yarding would be accomplished using line skidding type systems. This means the use of winches and cables with chokers. No wheeled yarders or those employing a grapple type system would be used. Tree length yarding would be used in areas that have heavy accumulations of logging residue. All loading operations would take place within the confines of existing roads or landings that would be constructed for this proposal. All yarding operations that disturb the soil would cease when soil moisture exceeds 20 percent.

Special Yarding Units

A low ground pressure type yarding system capable of lifting and carrying logs fully suspended off the ground would be utilized. Logging corridors would be a minimum of 100 feet apart except where converging near landings. Such equipment may be permitted off the corridors for lateral skidding only under the following conditions:

1 - A cushion of slash and other debris can be maintained under the equipment while yarding of logs at all times to a minimum depth of five inches above mineral soil.

2 - In the absence of condition 1 above, no more than two round-trips would be permitted over the same ground by the yarding equipment.

3 - Distance of lateral skidding excursions from the approved corridors is limited to one-third the distance, or 33 feet, between the yarding corridors.

Transportation

Two entry routes would be used for logging operations. Special Yarding unit 4 would be accessed by the existing southern entrance (see Exhibit 3). After logging operations are completed within this unit this route would be closed. All other operations would utilize the newly constructed entry route.

Two temporary spur roads would be built for this proposal (see Exhibit 3). Spur A would be approximately 600 feet in length and access Selective Cut unit 5 as shown on exhibit 5. Spur B would be approximately 5,000 feet in length and provide access to both Selective Cut units 2 & 3. When operations are completed these roads would be recontoured, seeded and closed.

Access needs into and through the public lands and the overall road densities within the Fifteenmile Creek subwatershed were developed using the following considerations. The United States Forest Service has blocked the north access road 1 mile north of the proposed sale area. A new access route would be built to replace the existing access route from the south. Access to private land inholdings and unpatented mining claims would be maintained. Road densities both within the proposed sale area and the subwatershed would not be increased.

At present there are 2.7 miles of driveable road within the proposed sale area. In the need to support the proposed logging operations there would be a temporary increase in the miles of road used. After logging operations are completed, with the use of road blockages and road closures, the total amount of driveable roads would be reduced to 2.0 miles. Points of blockage would be placed where access needed for private inholdings would not be impaired.
A new future entry route for the Boise Cascade Corp. has been identified because of the loss of access that would occur from the closing of the existing southern entry route (see Exhibit 3).

Logging Residue Disposal

All green logging residue within 25 feet of roads in the sale area would be piled. Residue piles identified for future wildlife habitat would be retained, and all others would be burned. All other residue would be lopped and scattered throughout the sale area, especially over landings and closed roads, to help promote nutrient cycling, provide additional wildlife habitat and reduce soil erosion.

Natural Resource Considerations

Riparian Areas

All areas of riparian habitat that may be directly impacted by the proposed action would be placed inside a buffer, and these areas would be called Riparian Management Zones (RMZ's). The proposed sale area includes intermittent streams with or without a well defined channel, intermittent seepages, ponds and drainage ways having short periods of spring or storm runoff. The RMZ's within the proposed sale area would be measured from the high water mark 50 feet on both sides of the channel.

Fifteenmile Creek, the only perennial stream adjacent to the proposed sale area, would have a RMZ 200 feet wide from the high water mark. No activity in relation to harvesting or road construction would be allowed within or passing through any RMZ.

Wildlife Considerations

Timber sale preparation will comply with the Endangered Species Act (ESA) of 1973 and the Migratory Bird Treaty Act. If threatened or endangered plants or animals are discovered after the contract is awarded, it is the contractor's responsibility to cease operations, notify the authorized officer and comply with the ESA.

A Biological Evaluation (BE) was prepared for this action and informal consultation completed with the Fish and Wildlife Service under section 7 of the ESA. A copy of the BE is provided in Appendix B.

Biological Evaluation Summary

Bald eagle: The proposed action is expected to have no effect on bald eagle populations or occupied habitat.

Grizzly bear: The proposed action is not likely to adversely affect occupied grizzly bear habitat or existing recovery plan objectives.

Gray wolf: The proposed action is not likely to adversely affect gray wolf habitat or existing recovery plan objectives. Seclusion factors will be improved by the proposed action and ungulate populations will not be significantly impacted as a result of the proposed action.

Primary cavity nester habitat would be maintained where possible by implementing the following snag and green tree retention strategy.

Snag retention would comply with Washington State Forest Fire Protection Laws (RCW 76.04.222). All snags, cull trees, and large woody debris (20 inches dbh) would be retained for wildlife purposes. If any of the cull trees retained for wildlife use become hazardous to logging safety, the individual trees would be felled upon approval of the Authorized Officer.

Trees would be designated for harvest on an individual basis using the following wildlife considerations for leave trees:

* Two hard snags per acre (20 inches dbh or larger if possible) would be retained wherever available.

* All soft snags would be retained.

* Three cull trees per acre (20 inches dbh or larger wherever possible) would be retained.

* A minimum of 100 live trees per acre would be maintained in the selective harvest units and no less than 222 live trees per acre would be maintained in the special yarding units.

In addition to those considerations detailed above, 280 trees, both live and dead, were tagged throughout the sale area as wildlife leave trees in the selective harvest units.

The following stipulations would be added to the contract if nesting pileated woodpeckers or goshawks are located after the contract is awarded:

* All raptor nest trees determined by species would be retained, and a buffer around them would be designated by the Authorized Officer.

* In the case of the goshawk, no logging activity shall be conducted on a designated portion of the contract area from March 1 to September 30 of each calendar year. A minimum 30-acre nesting reserve would be established, and a post-fledgling family area of 400 acres would be designated. Logging activities would be suspended from March 1 - September 30 in the fledgling family areas.

* If a pileated woodpecker nest is discovered, a 15-acre nesting reserve would be established and logging activity would be suspended from May through July on the designated portion of the contract area. The resultant loss in volume would be deducted from the total sale volume.

Cultural Resources

There are no known archaeological or historical sites within the cutting units of the timber sale. The south access road was evaluated to determine if it has historic significance. BLM evaluated the property for its eligibility to the National Register of Historic Places (Register) and had the State Historic Preservation Officer (SHPO) review the evaluation. BLM and SHPO concurred that the property is ineligible for the Register.

The timber contract would include stipulations requiring a work cessation, and immediate notification to the BLM Authorized Officer, if a Native American or non-Native historical site more than 50 years old is unexpectedly encountered. Upon notification, the sale would be redesigned to minimize damage to any unanticipated sites which had been uncovered during harvest or road construction. It is feasible that some damage to a site may occur before it is recognized or identified for protection.

Noxious Weeds

Surface disturbances such as skid trails, landings, and road cuts would be seeded as soon as possible after the suspension of logging operations. A prescribed weed-free seed mixture would be applied to disturbed areas to prevent the occurrence of additional noxious weed populations.

Noxious weeds requiring treatments would be inventoried and later included in the Spokane District Noxious Weed Control Program. Noxious weed treatment alternatives would include chemical, biological, mechanical and cultural control. All proposed weed control project sites will require threatened and endangered (T & E) plant/animal and cultural clearances prior to treatments.

Fuels and Fire Effects

Harvesting of timber in the area will cause a short term increase in ignition potential due to the creation of fine dead fuels, while reducing the total fuel loading of the areas under consideration for treatment

by as much as 50%. Piling and burning of activity fuels adjacent to the roads and landings, and compaction and scatter procedures away from these areas will minimize the increase in ignition risk, potential rates of spread, and potential fire intensities.

Up to 100 machine piles 20 feet in diameter will result from harvesting and treatment as described. These will be piled in locations such as landings and on the soil, and would be burned under weather and moisture conditions that would limit burning temperature and fire intensity.

Other Considerations and Stipulations

Standard procedures to be included in the proposed timber sale contract include those identified in the Contract for the Sale of Timber (Lump Sum Sale), BLM Form 5450-3 (Appendix C). The purchaser would be required to comply with all Washington State fire regulations (RCW 76.04.222) and to locate the major trails of the logging plan on the ground as a prerequisite to obtaining approval of a written logging plan.

III. ALTERNATIVES CONSIDERED

No Action

Under the No Action Alternative, no timber would be harvested and no roads would be constructed.

Alternatives Eliminated

Other alternatives to the Proposed Action were considered. However they were eliminated from further consideration since they would either not meet the objectives of the proposal or would result in unacceptable impacts. Silvicultural prescriptions such as clear cutting were briefly considered but believed not warranted in this area. Modification of cutting units was also considered but eliminated because since it would either not address the stated objectives or would be nothing more than a meaningless alternative. Therefore, the Interdisciplinary Team decided that the proposal was the only reasonable alternative to pursue for the Mineral Mountain parcels.

IV. AFFECTED ENVIRONMENT

General

This proposed action is located in the Fifteenmile Creek subwatershed and is part of the Upper Columbia Watershed (Lake Roosevelt).

The Fifteenmile Creek subwatershed is approximately 10,000 acres in size. It is located on both Jumbo and Mineral mountains which are split by Fifteenmile Creek and its drainages. Fifteenmile Creek is the principle drainage for all waters within the subwatershed. The subwatershed has a general southeast aspect with elevations ranging from 2,200 feet to 4,542 feet.

Ownership within this subwatershed includes approximately 5,670 acres of private land (57%), 3,200 acres of State DNR land (32%), 830 acres of BLM land (8%) and 300 acres of Forest Service land (3%).

The public land administered by BLM is located on the south side of Mineral Mountain. The topography ranges from a low of 2,600 feet to a high of 4,000 feet.

These areas have been modified by either past fire events or by human caused activities such as

mining, timber cutting, grazing and so forth. The following is a short description of all the adjacent areas surrounding the proposed sale area. They are a mixture of both private and state ownership. (See Exhibit 7.)

Area 1 - This area borders the west and south sides of the proposed action and is in private ownership. The west side is a mosaic of both open, brushy areas and areas covered in 80 year old secondary stands of Douglas fir/western larch. Both the openings and the secondary stands are the creation of past fire events. Large old growth trees (age > 100 years dbh > 18") are widely scattered throughout the area. Fifteenmile Creek is the main physical feature in this area and is surrounded by thick stands of western red cedar along with a mixture of hardwoods. The south side of this area is composed mostly of lodgepole pine, reflecting the recent fire history of the area. These lodgepole pine stands generally stop at the boundary of the BLM.

Area 2 - This area borders the east side of the proposed action and is in private ownership. This area is a mosaic of both open, brushy fields and second growth timber, approximately 40 years old. The timber stands consist of large patches of Douglas fir/western larch along with a mixture of some hardwoods. Both past fire events and timber harvesting have combined to create this mosaic. Hope Creek, a perennial stream, is the main physical feature and is surrounded by thick stands of western red cedar and hardwoods. Large old growth trees are widely scattered throughout the area.

Area 3 - This area borders the north side of the proposed action and is State land administered by Washington State DNR. It is a mosaic of both large open, brushy openings and patches of 40 year old Douglas fir and grand fir with a scattering of large old growth trees. It was almost totally created by past fire events with little or no evidence of timber harvesting. It includes the top of Mineral Mountain, the main physical feature in this area, the headwaters of Hope Creek and parts of Fifteenmile Creek.

Water Resources

Fifteenmile Creek Watershed

The proposed sale area lies within the Fifteenmile Creek subwatershed (see Exhibit 9) which encompasses approximately 10,000 acres. This subwatershed is part of the Upper Columbia watershed (Lake Roosevelt) which is the region's largest resident fishery, approximately 3.5 miles downstream. Fifteenmile Creek, Hope Creek and a third unnamed creek on Jumbo Mountain are the three perennial streams within the subwatershed. Fifteenmile Creek alone lies adjacent to the proposed sale area. Many intermittent streams, ponds, seepages and drainage ways exist throughout the watershed and the proposed sale area. All natural waters within the subwatershed flow into Fifteenmile Creek. Road densities within the subwatershed are moderate to high, ranging from 2.0 to 3.5 miles per square mile. There is little available information regarding past logging activities and water resources within the Fifteenmile Creek subwatershed. Over the past 70 years, an estimated 75 percent of the Fifteenmile Creek subwatershed has been affected by logging and mining activity. In the past 20 years, about 20 percent of the subwatershed has been logged.

Past areas of logging activity that are older than 10 years are considered fully stocked, which is a benefit to soil and water resources within the subwatershed. Select upland reaches in the Fifteenmile Creek subwatershed are in fair hydrologic condition considering the past increases in stream runoff from forest impacts, that include natural and manmade management actions.

Stand density along streams are a vital component in protecting water quality and maintaining desirable stream flow temperatures. Streamside structure in relationship to height is varied due to past logging

activities. These activities have reduced desirable cover in many riparian areas within the watershed and thus lessened the appropriate canopy cover to provide future riparian area shade for maintaining desirable water temperatures.

Mineral Mountain Timber Sale

The water courses or drainage areas on BLM within the proposed timber sale area are ephemeral in nature and exhibit minor amounts of lower bank cutting and deposition of unconsolidated channel bottom materials. These drainages run water during periods of peak snow melt and during intense storm frequencies.

Soil Resources

The general soil mapping unit within the proposed timber sale area is described in the Stevens County Soil Conservation Service's Soil Survey as Atis-Newbell-Donavon. These deep, well-drained soils are found on nearly level to very steep slopes; they were formed in mixed glacial till with a mantle or admixture of volcanic ash and loess. Other soils within the proposed project area are formed in glacial till, colluvium and residuum and contain a mantel or admixture of volcanic ash, loess, with rock outcrops found throughout the area.

These forest soils have moderately rapid permeability and moderate water holding capacity. The surface water runoff and water erosion potential is high when these soils are saturated.

Wildlife Habitat

Habitat conditions are fragmented over approximately 75 percent of the Fifteenmile Creek subwatershed due primarily to past timber harvest, mineral extraction and associated road construction.

BLM-administered land in the proposed action area is currently providing large trees (>15 in. dbh) and associated habitat that can be described as mature, multi-storied stands of two or more age classes. The five patches exhibiting these characteristics are extremely small (<20 acres) and two of them have been eliminated from the sale for habitat considerations.

These patches by themselves do not meet minimum size requirements for many wide-ranging species (i.e., goshawk, lynx, mule deer, etc.) they are probably more museum like in nature rather than functional habitat units.

The proposed action is located outside of the zone delineated as primary lynx habitat by the Washington Department of Fish and Wildlife and Colville National Forest.

No goshawk nests were located in the proposed action area. A three day survey effort produced only a single sighting of an adult female to the south of the sale area.

There are portions of the sale area which provide fair primary cavity excavator habitat. Patch size, the absence of large down logs and lack of large snags preclude it from being classified as optimum. A pileated woodpecker was observed foraging in the sale area, but no nest cavities were located. It is important to note that this area has been fire maintained and that there have been no previous harvest activity which would have removed large trees or eliminated down logs.

Mining-related features such as adits, trenches and exploratory pits often provide suitable bat habitat. Within the sale area these features lack suitable subsurface components or are flooded making them inaccessible to bats.

The general area is described as ungulate winter range by the Washington Department of Wildlife and Colville National Forest. Field surveys did not indicate that large concentrations of deer utilize the sale area at any time of year (See Appendix B).

Recreation

The Mineral Mountain area is not a destination recreation area. The dominant uses focus on hunting during the fall months of the year (both big game and bird hunting) and possibly snowmobile riding during the winter months. Washington State Department of Wildlife estimates about 100 hunter visitor use days in their game management unit 105 where Mineral Mountain is located. Other probable dispersed recreational activities that occur include camping and hiking, however visitor use information for these activities is lacking.

Range Management

The BLM parcel and the surrounding area makeup a 6,500 acre grazing allotment that includes private, state and BLM. The BLM parcel is approximately 12.7% of the acreage of this allotment and the proposed action affects only 28% of this acreage.

Usage on the BLM is 144 AUM's. There are numerous intermittent and perennial water sources throughout the greater allotment. There are no major livestock concentration areas on the BLM parcel.

Cultural Resources

The timber sale is located within the traditional use area of the Lakes and Colville Indians. The sale is approximately 10 air miles from the former Kettle Falls which was an important gathering location for many Columbia Plateau Native Americans including at least the Shuswap, Kutenai, Kalispel, Spokane, Sanpoil, Okanogan Similkameen and the Sinkaietk. Due to tribal interrelationships, the coniferous mountain areas abutting the Columbia River Valley were frequented by a variety of tribal individuals, with the Colville or Lakes use probably being predominant.

Expected native practices in or near the sale area include the collection of many coniferous forest materials of a floral and faunal nature, extraction of possible mineral resources, use of the area for possible religious purposes and conceivably camping to facilitate the resource collection or religious practices.

The sale area was surveyed by two BLM archaeologists in 1992 and 1993, with special consideration given to locating any cedar or other trees having bark alterations, stacked rock features, quarry locations or camp sites. While the surveys specifically sought these resources because they are the most commonly found by archaeologists in this terrain, every attempt was made to locate any sites that represented former native use or activities.

In addition, the Tribal Historian of the Colville Confederated Tribes was consulted regarding the possible location of sacred sites or Traditional Cultural Properties within the sale area. Because neither the field work nor the consultations produced positive results, there is presently no direct evidence of Native American cultural resources within the proposed Mineral Mountain Timber Sale area.

After the area was opened to non-Indians in 1896, miners immediately filed mineral location claims within and adjacent to the sale area, particularly between 1896-1910. Much of the area was explored and where ore bodies seemed particularly promising, adits were dug and ancillary mining features were built such as domestic cabins, blacksmith shops and shaft houses. Most of these structures were therefore built just after the land was acquired through mineral patents, and many of the mining structures may be found near but just outside of the sale area on private lands. Few mining properties are on BLM-administered land in the general sale area. These resources include an isolated cabin in the south portion of the sale, a three-cabin complex further to the north, two substantial adit and ore extraction locations in the center and eastern edge of the sale, a temporary camp site (a collapsed pole structure and historic refuse scatter) on the northwest corner of the sale, and transportation corridors to these various resources. There is also an old dirt road located in the timber sale area that provides access to the patented and unpatented mining claims. This road is a narrow, heavily eroded, rutted jeep trail more than 50 years old. None of these properties except the jeep trail, are within the cutting units boundaries (see exhibit 3).

While non-mining historic use of the area may be supposed, specific use and commensurate type of expected resources, such as a collapsed homestead shack representing a failed homestead attempt, may only be speculatively considered.

Vegetation

General Area

The Mineral Mountain proposed sale area has three habitat types: Douglas fir/ninebark (PSME/PHMA), Douglas fir-twinflower/ninebark (PSME-LIBOL/PHMA), and Grand fir/ninebark (ABGR/PHMA). (See exhibits 8 & 10, and Appendix A.) The climax tree species are Douglas fir and grand fir.

In the PSME/PHMA, the stand is composed of Douglas fir with occasional Ponderosa pines scattered throughout the stand. The PSME-LIBOL/PHMA is comprised of Douglas fir and a significant amount of Western Larch. The ABGR/PHMA intermingles with PSME-LIBOL/PHMA, except it has Grand fir (climax species) in the understory.

As their name indicates, each habitat type has a ninebark-complex vegetative understory. A partial list of the indicator species includes: ninebark (PHMA), oceanspray (HODI), pachistma (PAMY), serviceberry (AMAL), shiny-leaf spirea (SPBEL), Oregon grape (BEAQ), common snowberry (SYAL), heartleaf arnica (ARCO), wartberry fairybells (DITR), baldhip rose (ROGY), pinegrass (CARU), strawberry (FRAGA), and feather solomonplume (SMRA).

The understory is species-rich, with a high percentage regenerating off rhizomes and root crowns. Their response after a disturbance or fire is very vigorous.

The structure of the stands in the area is varied. Nearly every stand has a dominant overstory of Douglas fir and/or Western larch. Many stands are multi-storied, composed of two or more age classes.

The two-storied stands usually have advanced regeneration-(small to medium size poles) of Douglas fir. The multi-aged stands have a dominant overstory with an understory of large poles over small poles and saplings. Denser stands have less brush. A high percentage of the area (nearly 75 percent), including the majority of Douglas fir and Western larch, is infected with dwarf mistletoe.

Within the last 3 years, the spruce budworm infestation rapidly escalated. The infestation started in the eastern slopes of the Cascades and progressed as far east as the Colville and Chewelah area. This

outbreak now seems curtailed, possibly by 1993's wet, cool spring. No significant infestation of spruce budworm currently exists in the sale area.

Cutting Units

There are nine cutting units (see Exhibit 5). These units lie within the three habitat types described under Forest Vegetation and also shown on Exhibit 10. Following is a description of the effects harvesting would have on both volume and structure within these units.

Selective Cut Units 1,2,3

These 3 units are within the grand fir/ninebark/twinflower habitat type. Both the overstory and the merchantable understory are patchy with openings comprising 20% of the area.

The overstory is a mixture of Douglas fir/western larch. Average size is 15" at dbh with a crown closure of 80%. Total volume averages 18 mbf/acre.
The merchantable understory is 95% Douglas fir. Average size is 10" at dbh with a crown closure of 100%. Total volume averages 6 mbf/acre.

Selective Cut Unit 4

This unit is within the grand fir/ninebark habitat type, with a lot of integrating with Douglas fir/ninebark/twinflower habitat type. Openings comprise 10% of the area.

Overstory is a mixture of Douglas fir/western larch with a small component of lodgepole pine. Average size is 16" at dbh with crown closure averaging 80%. Total volume averages 16 mbf/acre.

The merchantable understory is a mixture of Douglas fir, western larch and grand fir. Average size is approximately 9" at dbh with crown closure averaging 90%. Total volume per acre averages 4 mbf/acre.

Selective Cut Unit 5

This unit is within the grand fir/ninebark/twinflower habitat type. Openings comprise 5% of the area. It is a single story unit.

Overstory is a mixture of Douglas fir/western larch. Average size is 8" at dbh with a crown closure of 100%. Total volume per acre averages 10 mbf/acre.

Special Yarding Units 1,2,3

These 3 units are in the grand fir/ninebark/twinflower habitat type. Openings comprise 20% of the area in these units. It is a single story unit.

These units are a mixture of 90% Douglas fir/western larch, 10% western red cedar and lodgepole pine. Average size is 6" at dbh with a crown closure of 100%. Total volume averages 24 mbf/acre.

Under the proposed action thinning of the trees in the SY units would result in increased incremental growth of the leave trees and the increase in the trees resistance to insects and disease. This is the result of increasing the availability of water, nutrients and sunlight to the leave trees.

In the PC units, impacts to leave trees from both dwarf mistletoe and armillaria root rot would be reduced. However, neither of these change agents would be eliminated. As in the SY units, the thinning of these stands would result in an increase in the amount of available water, nutrients and sunlight to the individual leave trees. Indirectly it would reduce the degree of stress the forest community is currently under and result in an increase in the amount of reproduction. The chances for catastrophic events, (i.e., large fires and insect infestations) to severely alter the forest community would also be reduced.

Sensitive Species Habitat

A population of *Botrychium montanum*, a State Sensitive/Bureau Assessment species, is located on public land outside the proposed timber sale area (see Exhibit 8). The population was estimated at approximately 70 plants. A *Listera* spp. was found growing in the same location as the *Botrychium montanum*, but was not identifiable to species due to a late survey. Since the habitat and vegetative characters fit those of *Listera borealis*, a State Sensitive/Bureau Assessment species, they should be examined again in late spring for positive identification.

V. ENVIRONMENTAL CONSEQUENCES

Water Resources

The proposed action would slightly increase water yields by triggering accelerated snowmelt as a result of the openings created in both the forest canopy and floor. Also, the timber harvest would alter the amount of precipitation interception and water transpiration, which could increase the precipitation available for streamflow. These impacts are expected to be minimal, however, since under the proposed action no large openings would be created within the cutting units.

Additionally, the density of the post-logging residual stand in conjunction with the existing dense duff surface layer and the prescribed stream buffering is expected to curb snowmelt and storm runoff.

Newly-constructed logging roads and landings can contribute 80-90% of the accelerated sediment load during and immediately after construction. Under the proposed action, primary increases in runoff and sediment delivery would be associated with road right-of-way clearings, skid trails, and landings.

These impacts would be mitigated, however, through the proposed road design and placement of the desired types and numbers of surface water dispersal and erosion control structures, such as water bars, culverts, ditching, and sloping.

New road construction would result in a more favorable grade than the existing roads and would reduce the risk of increased sediment load being transported to Fifteenmile Creek.

The old access route (0.5 miles in length), which is steep and deeply rutted, is currently a contributing source of sediment to Fifteenmile Creek. Reconstruction of the road would reduce sediment from the road surface during use. Closing this route after timber harvest operations are completed as proposed would significantly reduce sediment deposition into the ephemeral drainages and Fifteenmile Creek. Impacts to water resources as a result of implementing the proposal are expected to be minimal.

Soil Resources

Soil compaction is expected to occur on roads, skidtrails, landings, and other areas disturbed by logging equipment. Impacts to vegetation would include reduced vigor and less density than in uncompacted areas. Soil compaction would reduce water infiltration, resulting in increased runoff and

subsequent erosion. Rooting depths of seedling trees, woody plants, and grass/forbs species would become susceptible to dry soil conditions and nutrient deficiencies as a direct result of soil compaction. The design features of the proposed action would reduce impacts to soil resources--that is, suspension of surface disturbances when soil moisture exceeds 20 percent and site preparation and reseeding of disturbed areas immediately after logging operations. In summary, the impacts to soil resource impacts are expected to be minimal.

Wildlife Habitat

The proposed action would result in the disturbance of approximately 235 acres in the Fifteenmile Creek subwatershed. Over the life of the action approximately 2,000 acres (an area 10 times greater than the proposed action area) would likely be impacted from noise generated by heavy equipment, road use, and human presence.

As a result of the proposed action, 2.35 MMBF of timber or approximately 50 percent of the sale area's standing volume would be removed. The resulting modification of vegetative structure and composition would reduce available wildlife habitat over a minimum of 235 acres in the short term.

Post-harvest stand conditions are likely to favor common species, such as whitetailed deer, small rodents, insects and certain bird species in the short term. Habitat conditions will improve over the long term as road closures are completed and the understory vegetation is released in the special yarding units. No additional harvest or thinning activity is anticipated on public land for at least 20 years.

Populations of species such as lynx, goshawk, cavity nesters and pine marten may have already crashed in the Fifteenmile Creek subwatershed as a result of general habitat loss. This action is not expected to have a significant impact on these species or their habitat.

In the foreseeable future, it is not likely that adjacent commercial forest land will be managed in a manner which would improve habitat suitability factors such as large snags, down logs and lower road densities.

This further limits the potential viability of the 830 acres of public land located within this subwatershed to serve a habitat for species which require large blocks of structurally diverse late seral forest.

Road closures resulting from this action will lower road densities in the subwatershed slightly and improve seclusion factors. It is not anticipated that road densities will ever reach the desired levels of 1.5 miles or less per square mile given the amount of private ownership in the area.

Recreation

Recreation activities on the public land parcel would be severely curtailed, if not eliminated, while the timber sale contract is in effect due to the access restriction. Immediately following the timber sale activities, however, there would be an increase in wildlife-based recreation such as hunting for big game, deer and or bear, and viewing of other nongame species. This increase is due to the increased access, visibility and availability of forage or browse from opening of the timber stand.

This impact is usually short term, lasting at the most a few weeks following timber harvest until the newly available browse becomes exhausted or wilted. Hunting-based recreation would gradually reach another peak about one to two years later as grasses and other browse species become established. Over the long term, this impact would be negligible.

Range Management

Grazing's main effect on the proposed action is that the cattle may browse on any natural conifer seedlings that become established along the road banks and surface, which may cause minor seedling mortality. Any seedlings established within residual stands would not likely be affected by the presence of cattle.
and is anticipated that this will not change with implementation of the proposed action.

Cultural Resources

The only known impact the proposed action would have on cultural resources is that a historic dirt road would be destroyed. This impact is of little significance since the SHPO and BLM have determined that the road has very little historic significance. Since consultations with the Colville Confederated Tribes did not identify any traditional cultural properties or sacred sites within the sale area, no impact to these resources is expected.

Also, since no Native American sites were identified within the sale area, this resource is not expected to be impacted. It is possible, however, that a site may be located as the timber is harvested and some impact may occur.

Vegetation

Under the proposed action plant biomass and cover would be reduced as a result of the removal of trees. In selective cut units 1,2 & 3, harvesting would remove 50% of the overstory volume and 40% of the merchantable under story to be thinned. This would result in reducing the space occupied by the crowns to 60%. In selective cut unit 4, harvesting would remove 50% of the overstory volume, and 30% of the total merchantable understory volume, reducing the space occupied by the crowns to 60%. In selective cut unit 5 harvesting would remove 50% of the total overstory volume, reducing the crown closure or space occupied to 40%.
In the Special Yarding Units 1, 2 & 3 harvesting would remove 50% of the total volume, reducing the space occupied by the crowns to 50%. (See exhibit 5.)

Even though the conditions that trigger spruce budworm outbreaks are all present and would contribute stress to the stands, the next outbreak would not be as severe. There would not be any impact to known habitat of threatened or endangered plant species.

Noxious Weeds

Noxious weed populations can be expected to escalate throughout the proposed sale area as a result of proposed logging disturbance. Noxious weed seed may be transported to and from the proposed sale area by vehicular movement on travel corridors. The proposed noxious weed control activities would minimize the infestations until seeded and native species become established.

Fire Potential

The proposed action would increase the amount of fine dead fuels, causing an increase in the number of potential wildfire ignitions until the needles and smallest branches absice and become a part of the duff layer. It would also increase the amount of heavier fuels, creating the potential of increased fire intensity if a large fire should occur. The fine fuel danger created by the proposed action would be mitigated to a large extent by working the fuels into close contact with the soil by the traverse of the harvesting machinery and by lop and scatter procedures. Compacting will increase fuel moisture retention and hasten decay.

Machine piling and burning of both fine and heavy fuels along roads and landings will reduce risk of human caused ignition and the rate of spread, intensity, and probability of spread should a wildfire occur.

Alternative B (No Action)

Under the No Action Alternative, there would be no timber harvesting nor road construction. Much of the standing timber would become affected by the existing mistletoe infestation and the root rot pockets. There would be an overall decline in the vigor of the stands, and also some tree mortality, as a result of not controlling the mistletoe infestation. Stagnation from overcrowding would reduce stand health and vigor and would result in a net growth loss. The impacts to wildlife habitat would be minimal. This area would continue to provide and island of some of the relatively undisturbed wildlife habitat in the Fifteenmile Creek drainage.

Recommended Mitigation

Vehicles should be cleaned before entering the proposed project area to remove seed picked up by vehicles and reduce the spread of noxious weeds.

VI. AGENCIES AND INDIVIDUALS CONSULTED

- Carl W. Ewan, Unpatented Mining Claimant
- Bill Joyner, Unpatented Mining Claimant
- Bill Newl, Unpatented Mining Claimant
- Donna Bruce, Unpatented Mining Claimant
- Pacific Coast Mines, Unpatented Mining Claimant
- Pathfinder Gold, Unpatented Mining Claimant
- Dave Weeman, Boise Cascade Corporation, Unit Chief Forester
- Bruce Bernhardt, District Ranger, Kettle Falls RD, USFS
- Department of Natural Resources, N.E. Area Office
- Allen Palmanteer, Area Habitat Biologist, Wash. State Dept of Wildlife
- James Alto, TFW Biologist, Spokane Tribe of Indians
- Sara Folger, Inland Empire Public Lands Council
- Adeline Fredin, Historian, Colville Confederated Tribes
- Greg Griffith, Office of Archaeology and Historic Preservation
- Michelle Eames, Ecological Services, U.S. Fish and Wildlife Services

VIII. BLM EMPLOYEES INVOLVED IN ASSESSMENT PREPARATION

- George Brown, Geologist
- Pamela Camp, District Botanist
- Bill Carleton, District Fire Management Officer
- Allen Gardner, Forester
- Kathy Helm, Technical Writer-Editor
- Clarke Johnston, Forestry Technician
- Rick McComas, Natural Resource Specialist - Range
- Judy Thompson, Archaeologist
- Todd Thompson, Wildlife Biologist
- Robert Troiano, Natural Resource Specialist - Soil, Air, and Water
- Gary Yeager, Environmental Coordinator & Recreation Planner

EXHIBIT 1
GENERAL LOCATION

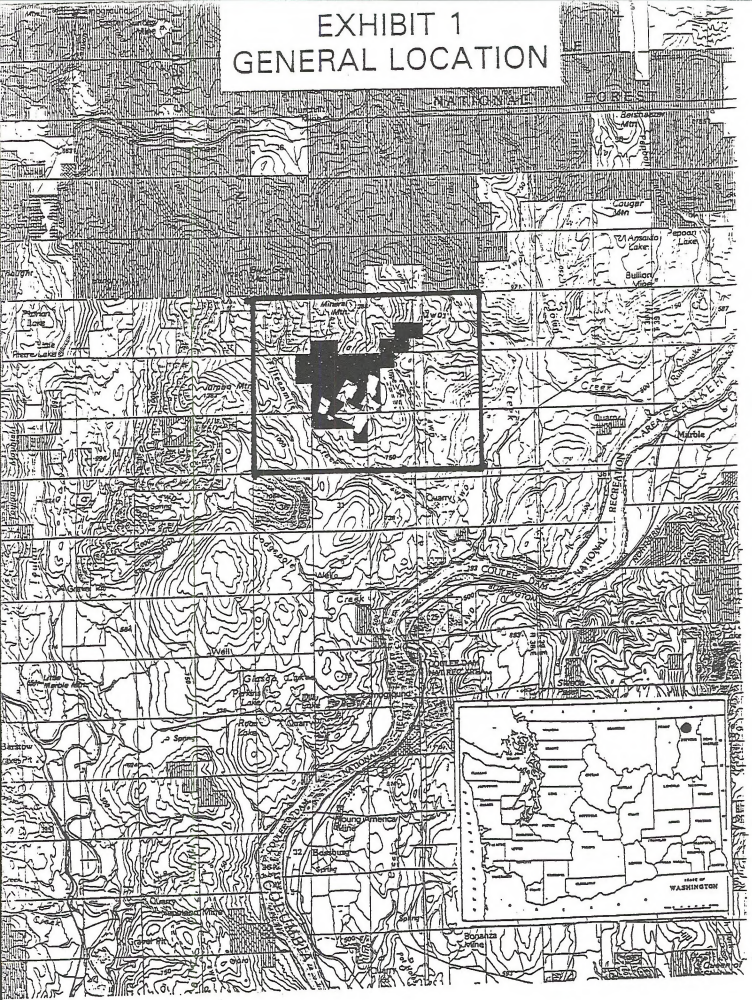


EXHIBIT 2
TOPOGRAPHY

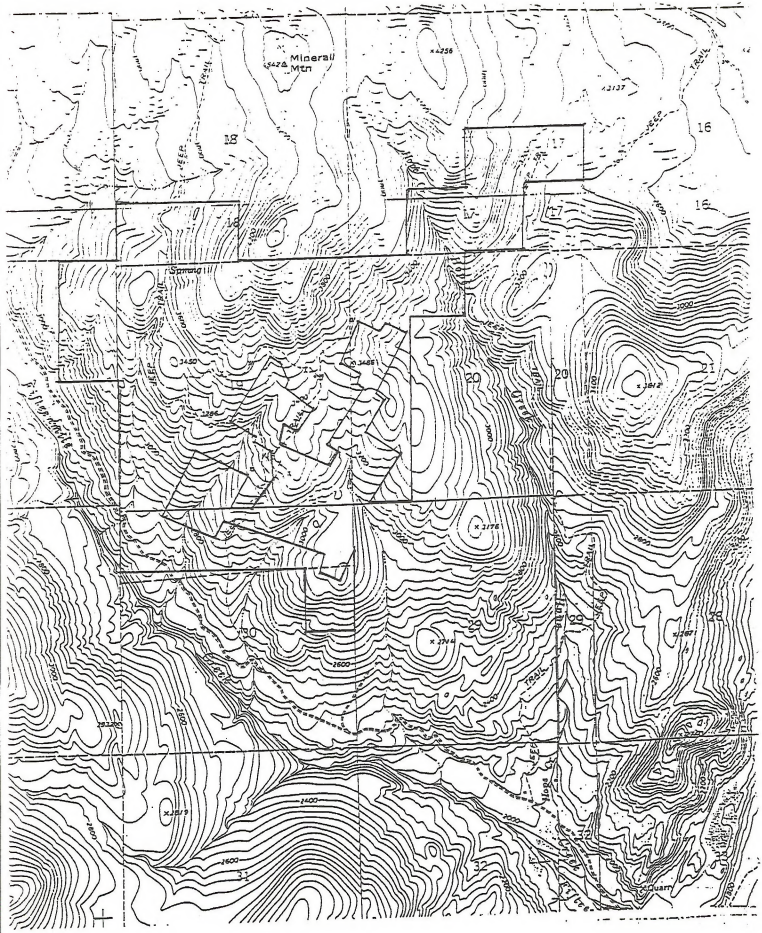

Mineral Mtn
Spring
Spring
Spring

EXHIBIT 3
TRANSPORTATION - PROPOSED ACTION

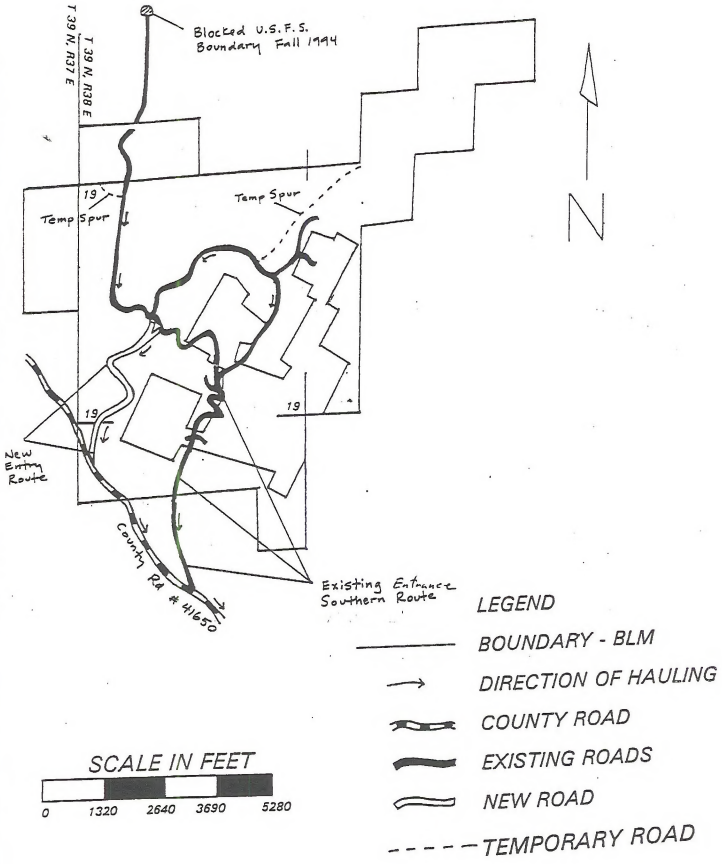
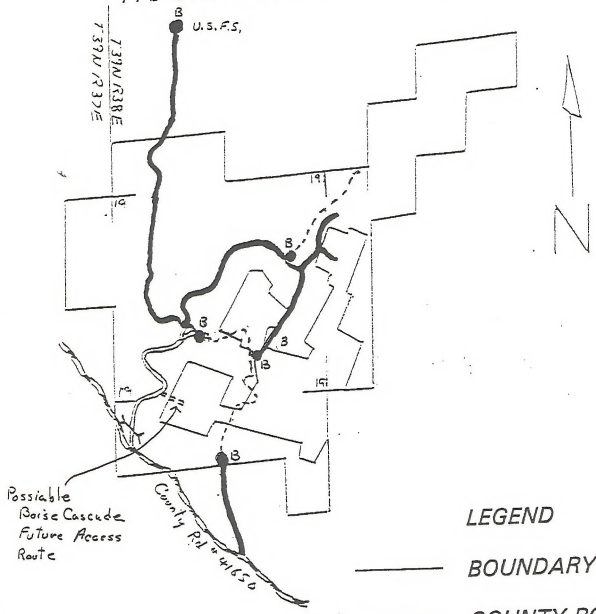


EXHIBIT 4

TRANSPORTATION - POST SALE



LEGEND

BOUNDARY - BLM

COUNTY ROAD

EXISTING - OPEN

EXISTING - CLOSED

B POINTS OF BLOCKAGE

GATE

SCALE IN FEET

0 1320 2640 3960 5280

EXHIBIT 5
CUTTING UNITS - PROPOSED ACTION

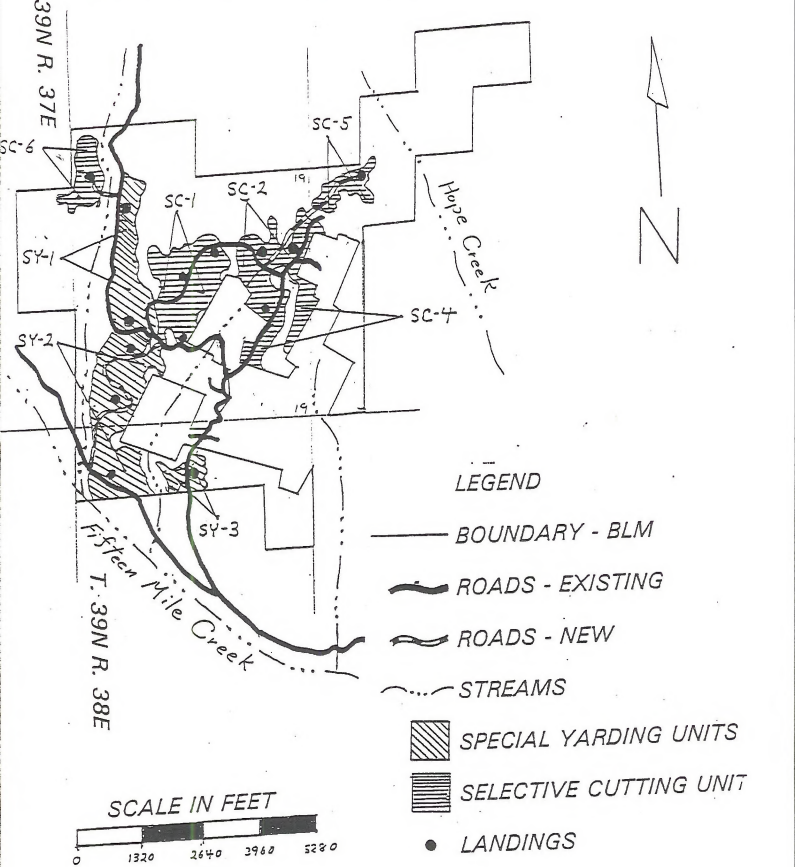


EXHIBIT 6
CRITICAL AREAS

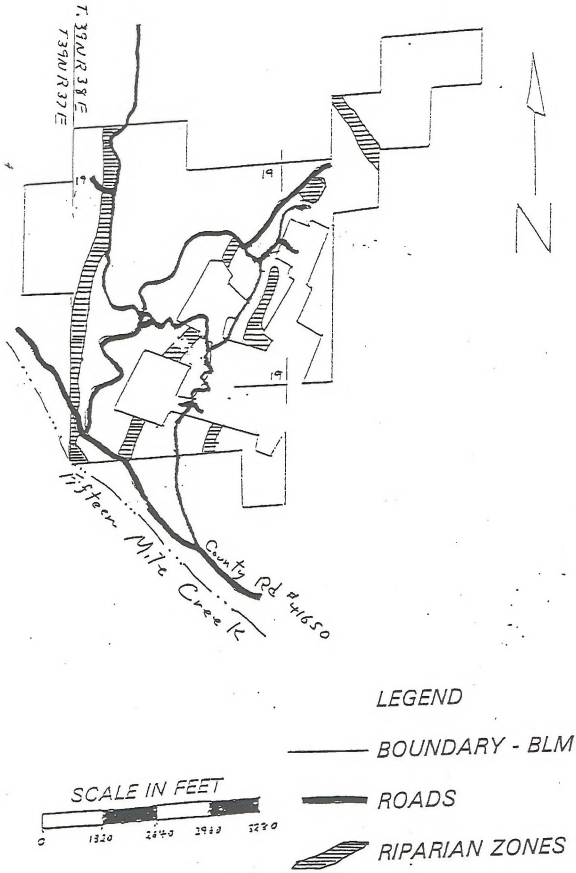
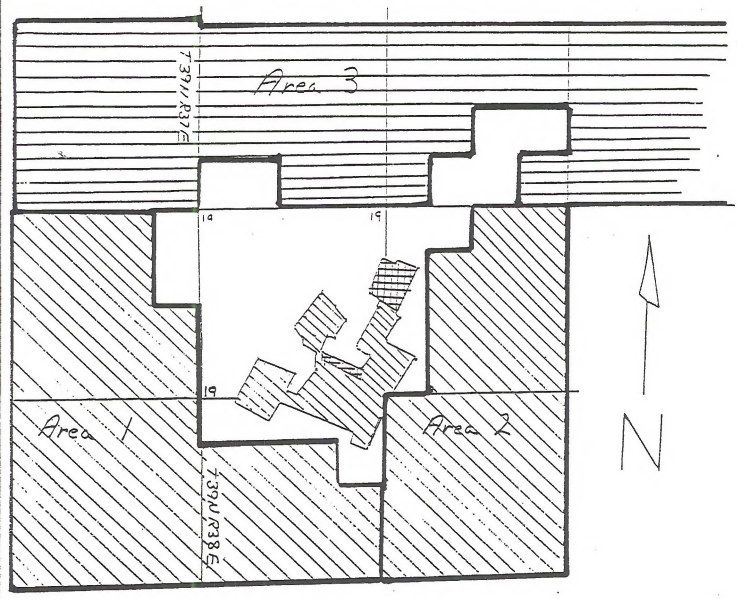


EXHIBIT 7
ADJACENT AREAS OF OWNERSHIP



LEGEND

BOISE CASCADE CORP.

DEPT. OF NATURAL RESOURCES (STATE

PRIVATE - NON INDUSTRIAL

BUREAU OF LAND MANAGEMENT

DESCRIPTIVE AREAS BOUNDARY

EXHIBIT 8
AREAS SURVEYED - BOTANICAL

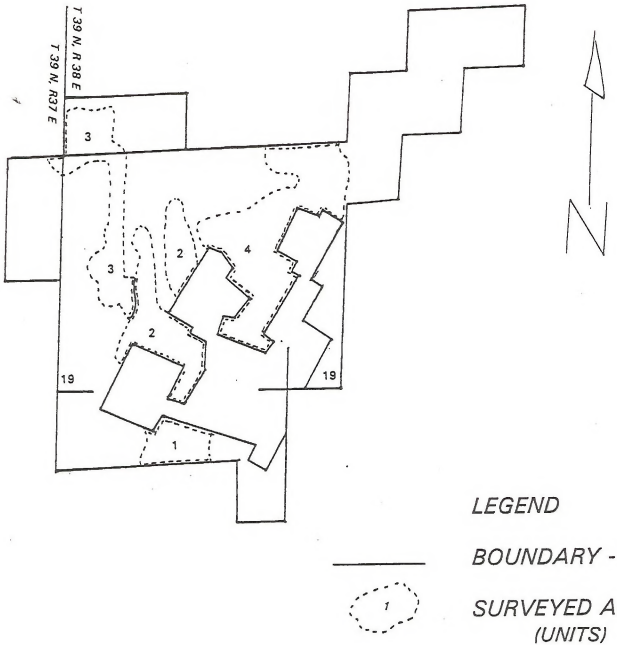
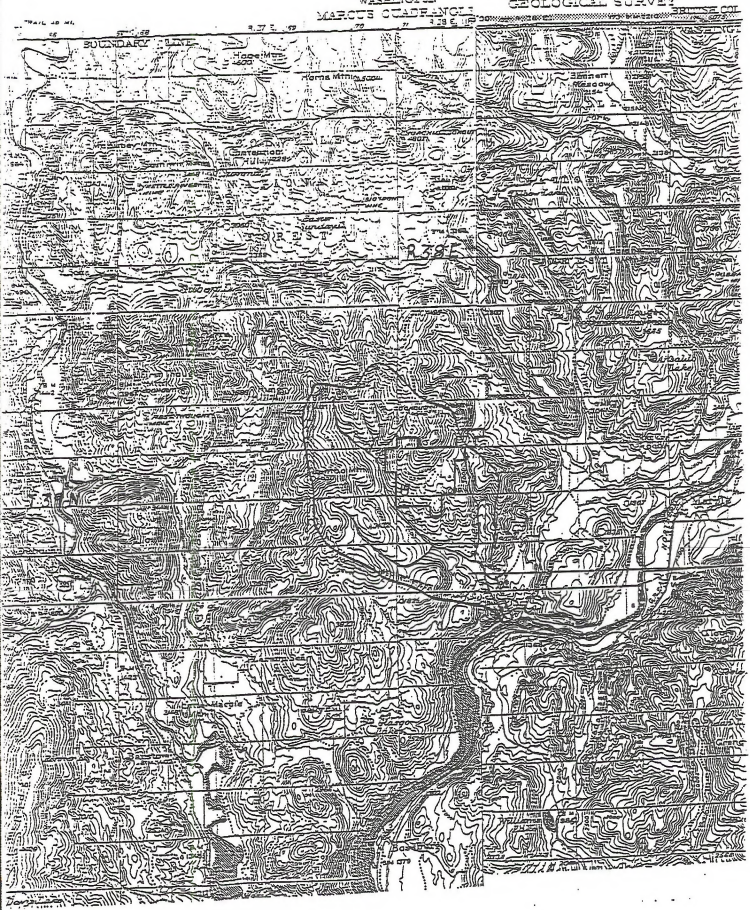


EXHIBIT 3

FIFTEEN MILE CREEK SUBWATERSHED


UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON
MAROTS BUTTE NW QUADRANGLE
BOUNDARY LINE
Horns Mtns.
Horns Mtns. spgs.
Kissinger
Kissinger Lake
Kissinger Spgs.
Wickiup
Wickiup Spgs.
Wickiup Reservoir
Deschutes
Deschutes R.
Deschutes Spgs.
Davis Lake
Davis Lake Spgs.
Davis Lake Butte
Davis Lake Butte Spgs.
Maiden Peak
Maiden Peak Spgs.
Crane Prairie
Crane Prairie Reservoir
Crane Prairie Spgs.
Crane Prairie Butte
Crane Prairie Butte Spgs.
Rosland
Rosland Spgs.
Rosland Butte
Rosland Butte Spgs.
Cultus Mtn.
Cultus Mtn. Spgs.
Cultus Lake
Cultus Lake Spgs.
Cultus Lake Butte
Cultus Lake Butte Spgs.
Cultus Creek
Cultus Creek Spgs.
Cultus Creek Butte
Cultus Creek Butte Spgs.
Cultus Corral
Cultus Corral Spgs.
Cultus Corral Butte
Cultus Corral Butte Spgs.
Cultus Corral Creek
Cultus Corral Creek Spgs.
Cultus Corral Creek Butte
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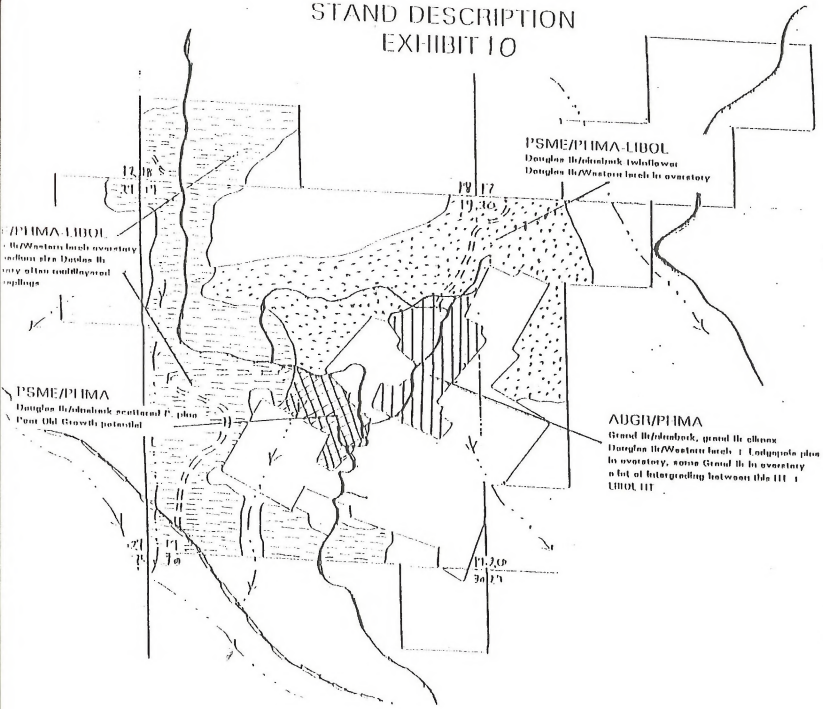
Cultus Corral Creek Butte Spgs.

STAND DESCRIPTION
EXHIBIT 10



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DENVER, CO 80225

APPENDIX A

BOTANICAL SURVEY

For the purpose of conducting a botanical survey, the proposed sale area was divided into 4 units (see exhibit 8). Most of this area appears to be in an early-middle to late-middle successional stage. Areas of dense small, pole-size timber, i.e. the "special yarding" units, may have experienced stand replacement fires within the last 100 years. Areas of larger timber probably escaped these fires. There is evidence of fires scattered throughout the area. Low-intensity fires have historically occurred every 10-15 years in these stands. There is no evidence of large-scale logging in the area. Human-related disturbances, which include roads, building sites and mining activities, have contributed to an increase of shrubs and weeds, especially knapweed and Klamath weed.

Unit 1 is situated on gentle south to southeast/southwest facing slopes, with a few shallow draws in the east half of the unit. Elevation ranges between 2700'-2900'. Soils are somewhat shallow and rocky, though there is little exposed rock in the unit except for on the extreme west side. Vegetation in most of the unit indicates relatively dry conditions, while the east quarter is more moist.

Vegetation in unit 1 consists primarily of forest dominated by Douglas fir, with lesser amounts of ponderosa pine and western larch. Understory trees include Douglas fir, ponderosa pine, paper birch and quaking aspen. Shrub layer dominants include ninebark and shiny-leaf spirea, with tall Oregon grape, pacific serviceberry, rose, and ocean spray also common. Tall Oregon grape is dominant in small patches. Floor vegetation through most of the unit is sparse and is dominated by heartleaf arnica, rattlesnake plantain, sweet cicely and western meadowrue. On the west side of the unit are several forest openings with dense ninebark. One of these appears to have been a road or landing in the past and has been invaded by knapweed and Klamath weed. The east quarter of the unit is more moist and consists of western red cedar, grand fir, paper birch, prince's pine, tall Oregon grape, hazelnut and Douglas maple. There are several pure patches of hardwoods in this area. The open rocky area on the west side of the unit has a variety of species, most of which had faded, but dominants include arrowleaf balsamroot, knapweed, Klamath weed, and grasses.

The north end of Unit 2 sits on south and southeast facing upper slopes and ridgetops of moderate incline (20-50%). The south portion of the unit is south, southeast and southwest facing with lower and middle slopes, and includes a 1st order stream bottom. Slopes on the eastside of the stream are somewhat steep (70%+), while the rest of the unit is more moderate. Elevation ranges from 3000'-3600'. Soils are similar to those in unit 1 but there is much more exposed rock, especially on the upper slopes and ridgetop at the north end. Moisture is relatively low through most of the unit except for the extreme lower slopes and stream bottom. The stream was only flowing for about 200' north of the BLM property line.

Most of the unit consists of forest dominated by Douglas fir with lesser amounts of ponderosa pine and western larch. Understory trees include the same species, plus paper birch and quaking aspen on lower slopes. The northeast part of the unit has a more significant component of western larch than the rest of the unit. Dominant shrubs on middle and upper slopes are ninebark boxwood and common snowberry, while lower slopes have ninebark, Oregon boxwood, pacific serviceberry, and rose. Floor vegetation is sparse and is dominated by pinegrass on middle and upper slopes, while lower slopes have a mixture of pinegrass, false Solomon's-seal, wartberry, fairybells, twinflower, and queencup beadlily. Extreme lower slopes and the stream bottom are forested with western red cedar, grand fir, paper birch, quaking aspen and Douglas maple, with Oregon boxwood, thimbleberry, prickly currant, hazelnut, wild sarsaparilla, queencup beadlily, baneberry, twinflower, and starry false Solomon's-seal being common in the shrub and floor layers. There are numerous shrubby patches with ninebark, pacific serviceberry, ocean spray and kinnikinnick most common, as well as several small patches of quaking aspen. Most of the shrubby openings have been invaded with knapweed. A number of open, rocky areas are scattered through the unit, with the largest of these located on the upper slopes and ridgetops at the north end of the unit. Common species include ninebark, Oregon boxwood, kinnikinnick, lowbush penstemon, grasses, strawberry, arrowleaf balsamroot, salsify, hawkweed, silverleaf phacelia, knapweed, Klamath weed, and selaginella. A few of these openings are dominated by pinegrass, with few other species present.

Most of Unit 3 lies on middle and lower slopes of moderate grade (20-50%). The extreme northern part of the unit includes a wide, flat stream bottom. Slopes are primarily west facing but include all aspects except due east. A small portion of the unit is on upper slopes approaching two knobs. Elevations are 3200'-3600'. Soils are similar to units 1 & 2, with only a few small rocky exposures within the forest. Vegetation indicates moist to mesic conditions through nearly all of the unit. The spring at the north end of the unit was running; however the water is being siphoned off for livestock. The portion of stream channel running through this same area was wet and seepy but not running.

Much of this unit consists of dense pole-size and sapling Douglas fir, with a trace of western larch and ponderosa pine. Understory trees are predominantly Douglas fir but also include grand fir, western red cedar, and Douglas maple. The portion of the unit running along the road on its east side is only sparsely forested, with numerous patches of ninebark, especially toward the south end, which is disturbed by prospecting and old roads. The area around the spring and in the stream bottom is densely forested with western red cedar, and the extreme north end of the unit has a mixture of larger western red cedar and western larch. Dominant shrubs include ninebark, common snowberry, Oregon boxwood, and rose, with tall Oregon grape, shiny-leaf spirea, and pacific serviceberry also being common. Pinegrass is the dominant floor species through most of the unit, with false Solomon's-seal, heartleaf arnica, rattlesnake plantain, and wartberry fairybells also common.

The extreme north of the unit has a floor layer of queencup beadlily, twinflower, and pathfinder. Shrub and floor vegetation around the spring and in the stream bottom are very sparse due to livestock grazing and shading.

There is one small area across the road from the spring that is not densely shaded or heavily trodden and has distinctive riparian vegetation, including red-osier dogwood, prickly currant, betony, bulrush, nettles, american brooklime and dense moss covering. Approximately 100 yards north of this area, there is a large (50' diameter) opening that appears to have had standing water earlier in the year. At the time of this survey, the area was muddy and vegetated with grasses, mint, retrorse sedge, columbia sedge and spike-rush. The large opening that borders the unit southwest of the spring has large amounts of bare or selaginella-covered ground, with serviceberry, blue elderberry, Wyeth buckwheat, a small amount of sticky laurel, rosy pussytoes, prairie smoke, yarrow, salsify, lupine, lomatium, arrowleaf balsamroot and grasses present.

Unit 4 lies on middle and lower, predominantly east to southeast facing slopes. Grades are moderate to steep in the north 1/3 of the unit and become nearly flat in the south 1/3. Several shallow draws run through the unit. Elevations are 3200'-4000'. Soils are similar to those of other units. Moisture conditions are mesic through much of the lower, flatter portion of the unit and relatively dry on the higher slopes.

Forest vegetation in most of unit 4 consists of Douglas fir with a small amount of western larch in both the overstory and understory. Scattered paper birch and quaking aspen occur in the understory, especially in the northeast and south parts of the south end of the unit, where there are a number of hardwood patches. The west central portion of the unit also has a component of grand fir in both the overstory and understory. Dense western red cedar occurs at the extreme south of the unit and in the southeast corner of the portion of the unit in Sec. 20. Ninebark is the dominant shrub through most of the unit, with Oregon boxwood, pacific serviceberry, tall Oregon grape, and common snowberry also common. More mesic areas support Douglas maple, rose, and hazelnut in addition to the above. Floor vegetation is commonly sparse, with pinegrass and rattlesnake plantain the most consistent species. More mesic and moist areas have starry false Solomon's-seal, wartberry fairybells, and queencup beadlily. Areas with dense western red cedar have extremely sparse shrub and floor layers. Several rocky openings occur on the west side of the north half of the unit. The west side of the unit also borders on a large (>100 acre) ridgetop rocky meadow. Vegetation in these areas includes chokecherry, Wyeth buckwheat, lowbush penstemon, sticky laurel, and ninebark. Grasses, especially bluebunch wheatgrass, dominate the lowest layer, with arrowleaf balsamroot, yarrow, salsify, and silene among the common herbs. This area has not been as heavily invaded by knapweed and Klamath weed as many of the areas of similar habitat.

Potential Special Status Species

The following list is based on listings and distribution data from the 1990 Washington Natural Heritage Plan, Flora of the Pacific Northwest, and BLM files.

SPECIES	HABITAT	HABITAT PRESENT	SPECIES PRESENT
Antennaria corymbosa	Moist meadow/wetland		
Antennaria parvifolia	Dry/open/sandy/PIPO	X	
Astragalus microcystis	Gravelly/sandy/open woods/ grassy slopes	X	
Botrychium ascendens	THPL/grassy/wet	X	
Botrychium crenulatum	Dry microsites in seeps/ springs/bogs		
Botrychium lanceolatum	Usually moist/wet/shaded OR more open	X	
Botrychium lunaria	Floodplains/creeks/sedge meadows		
Botrychium minganense	Riparian forest/sedge meadow	X	
Botrychium montanum	Shady forest/riparian	X	X
Botrychium pinnatum	THPL/TSHE forest	X	
Botrychium simplex	Moist to dry meadows/forest	X	
Carex aena	Moist to wet	X	
Carex buxbaumii	Bogs/marshes/wet meadow		
Carex comosa	Marshes/lake margins/ ditches/wet meadow		
Carex flava	Wet areas	X	
Carex hystricina	Wet areas	X	
Carex paupercula	Sphagnum bogs/sedge meadow		
Carex rostrata	Peat bogs		
Carex scopulorum var.prionophylla	Wet meadow/marshes/riparian	X	
Carex stenophylla	Open/gravelly/drying in summer/grassy areas	X	

SPECIES	HABITAT	HABITAT PRESENT	SPECIES PRESENT
Carex svchnocephala	Marshes/lake margins		
Cheilanthes feei	Cliff crevices/limestone		
Cicuta bulbifera	Marsh/bog/edge of standing water		
Cryptogramma stelleri	Moist shaded cliffs		
Cyprepedium calceolus var. parviflorum	Bogs/damp woods/riparian/ grassy forest openings	X	
Cyprepedium fasciculatum	Moist to dry open forest/ PSME/PIPO	X	
Dryas drummondii	Dry/rocky/limestone cliffs	X	
Dryopteris cristata	Forest swamps/wet forest/ shrubby wetlands	X	
Eleocharis atropurpurea	Wet places/lake shores		
Eleocharis rostellata	Boggy areas around lakes		
Epipactis gigantea	Riparian/seeps/esp. near thermal waters		
Erigeron acris var. elatus	Generally swampy places		
Eriophorum viridicarinatum	Wet meadow/bog/cold swamp		
Gaultheria hispidula	Moist Sphagnum/forest	X	
Gentiana tenella	Moist places		
Geum rivale	Riparian/wetlands	X	
Howellia aqualitis	Ponds/sloughs/drying in summer		
Listera borealis	Riparian/PIEN forest	X	??
Lycopodium dendroideum	Dry/rocky slopes/open forest/THPL/TSHE/LAOC/ABGR	X	
Lycopodium inundatum	Wetlands		
Mimulus pulsiferae	Seasonally moist/open/ esp. PIPO/PSME		
Muhlenbergia glomerata	Riparian/wetlands	X	
Orobanche pinorum	Dense or open forest/ PSME/PIPO/ABGR	X	

SPECIES	HABITAT	HABITAT PRESENT	SPECIES PRESENT
Phacelia franklinii	Riparian/meadow/open slopes/roadsides	X	
Physaria didymocarpa var. didymocarpa	Open/rocky areas/talus slopes	X	
Platanthera obtusata	Damp to wet forest	X	
Poa nervosa var. nervosa	Basalt cliffs/often with DENU		
Ranunculus longirostris	Shallow ponds/lakes		
Ribes oxyacanthoides ssp. cognatum	Riparian/moist slopes/ talus above creeks	X	
Ribes oxyacanthoides ssp. irriqum	Riparian/slopes of moist to dry canyons	X	
Rubus acaulis	Meadows/bogs/forest	X	
Salix candida	Wetlands		
Salix maccalliana	Moist/open/wetland		
Salix tweedyi	Riparian/wetland	X	
Sanicula marilandica	Moist forest/wetland margin		
Sisyrinchium septentrionale	Wet or dry meadows/ riparian/wetland margin		
Teucrium canadense ssp. viscidum	Pond margins/riparian	X	
Thalictrum dasycarpum	Meadow/moist PSME forest/riverbanks		
Tillaea aquatica	Mudflats on lake edges		
Vaccinium myrtilloides	Moist forest	X	
Viola renifolia	Coniferous forest	X	

SPECIES LIST

Conifers	
Abies grandis	grand fir
Larix occidentalis	western larch
Pinus contorta	lodgepole pine
P. ponderosa	ponderosa pine
Pseudotsuga menziesii	Douglas-fir
Thuja plicata	western red cedar
Hardwoods	
Acer glabrum var. douglasii	Douglas maple
Alnus	alder
Betula papyrifera	paper birch
Populus tremuloides	quaking aspen
Shrubs	
Arctostaphylos uva-ursi	kinnikinnick
Amalanchier alnifolia	western serviceberry
Aralia nudicaulis	wild sarsaparilla
Berberis aquifolium	tall Oregon grape
B. repens	creeping Oregon grape
Ceanothus velutinus	sticky laurel
Chimaphila umbellata	prince's pine
Cornus stolonifera	red-osier dogwood
Corylus cornuta	hazlenut
Holodiscus discolor	ocean spray
Pachistima myrsinites	Oregon boxwood
Penstemon fruticosus	lowbush penstemon
Philadelphus lewisii	mock-orange
Prunus virginiana	common choke-cherry
Physocarpus malvaceus	ninebark
Ribes lacustre	prickly current
Rosa spp.	rose
Rubus parviflora	thimbleberry
R. spp.	bramble
Salix spp.	willow
Sambucus cerulea	blue elderberry
Shepherdia canadensis	soapberry
Spirea betulifolia	shiny-leaf spirea
Symphoricarpos albus	snowberry
S. oreophilus	mountain snowberry
Forbs	
Achillea millefolium	yarrow
Aconitum columbianum	monkshood
Actaea rubra	baneberry
Adenocaulon bicolor	pathfinder
Agoseris spp.	false-dandelion
Anaphalis margaritecea	pearly everlasting
Antennaria microphylla	rosy pussytoes
Arnica cordifolia	heart-leaf arnica
Balsamorhiza sagitatta	arrowleaf balsamroot
Campanula rotundifolia	scotch bluebells

Castilleja spp.	indian paintbrush
Cantaurea spp.	knapweed
Circaea alpina	enchanter's nightshade
Cirsium spp.	thistle
Clintonia uniflora	queencup beadlily
Corallorhiza spp.	coralroot
Disporum trachycarpum	wartberry fairybells
Epilobium spp.	willow-herb
Eriogonum heracleoides	Wyeth buckwheat
E. umbellatum var. subalpinum	sulfur-flowered buckwheat
Fragaria spp.	strawberry
Galium triflorum	sweet-scented bedstraw
Geum triflorum	prairie smoke
Gilia aggregata	gilia
Goodyera oblongifolia	rattlesnake plantain
Habenaria elegans	elegant rein-orchid
Heuchera spp.	alumroot
Hieracium spp.	hawkweed
Hypericum perforatum	klamath weed
Lilium columbianum	tiger lily
Linnaea borealis	twinflower
Listera spp.	twayblade
Lomatium spp.	lomatium
Lupinus spp.	lupine
Mentha spp.	mint
Monotropa uniflora	indian pipe
Orobanche fasciculata	clustered broomrape
Osmorhiza chilensis	sweet cicely
Phacelia hastata	silverleaf phacelia
Potentilla recta	erect cinquefoil
Pyrola picta	wintergreen
Ranunculus spp.	buttercup
Silene spp.	silene
Smilacina racemosa	false solomon-seal
S. stellata	starry false solomon-seal
Spiranthes romanzoffiana	hooded ladies-tresses
Stachys spp.	betony
Streptopus amplexicaulis	twisted-stalk
Thalictrum occidentalis	meadowrue
Tiarella trifoliata var. unifoliata	coolwort foamflower
Tragopogon spp.	goatsbeard
Trifolium spp.	clover
Verbascum thapsus	mullein
Veronica americana	american brooklime
Viola spp.	violet

<u>Graminoids</u>

Agropyron spicatum	bluebunch wheatgrass
Calamagrostis rubescens	pinegrass
Carex aperta	columbia sedge
C. retrorsa	retrorse sedge
Eleocharis spp.	spike-rush
Scirpus spp.	bulrush

Ferns & Allies	
Aspidotis densa	aspidotis
Athyrium filix-femina	lady-fern
Botrychium montanum	mountain grape-fern
B. virginianum	virginia grape-fern
Cryptogramma crispa	parsley-fern
Equisetum spp.	horsetail
Woodsia oregana	woodsia

Appendix B

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Spokane District Office
1103 N. Fancher
Spokane, Washington 99212-1275

IN REPLY REFER TO:

December 30, 1994

Michelle Eames
U.S. Fish and Wildlife Service
11103 E. Montgomery Drive #2
Ecological Services
Spokane, WA 99206

Dear Michelle:

Enclosed is a Biological Evaluation (BE) which addresses the potential effects of the proposed Mineral Mountain Timber Sale on the bald eagle, gray wolf and grizzly bear. The preparation of this BE fulfills the requirements set forth under the Endangered Species Act (ESA) of 1973 as amended, and as described in 50 CFR 402.12.

At this time, the BLM is requesting informal consultation under Section 7 (a) (2) of the ESA for the proposed Mineral Mountain Timber Sale and asks that the fish and Wildlife Service concur with our determination of not likely to adversely affect for this action.

BLM expects to release an Environmental Assessment (EA) for this action for a 30 day public review period early next week. A copy of this EA is provided as an additional source of supporting information.

I appreciate the technical assistance that you provided my staff in the development of this BE. Included as part of this document is an Action Summary Sheet which provides a quick reference to the key points of the proposed action. Any comments concerning the use of this form would be greatly appreciated. If you have any questions concerning this BE, please feel free to contact Todd Thompson at the above number.

Sincerely,

FOR Ann B. Aldrich
Border Resource Area Manager

ACTION SUMMARY SHEET

AGENCY:
Bureau of Land Management, Spokane District, Border Resource Area.

PROPOSED ACTION:
Mineral Mountain Timber Sale

Description: Harvest approximately 2.35 MBF of timber over a 36 month period. Total volume of standing timber on BLM land within the analysis area is estimated to be 10 MBF.

LOCATION:
County: Stevens

Legal: T. 39 N., R. 37 E., Sec 24
T. 39 N., R. 38 E., Sec 17, 18, 19, 20 & 30

USGS 7.5' Quads: Bleshazzar Mtn, China Bend, Bossburg, Churchill Mtn

WATERSHED:
Upper Columbia (Lake Roosevelt)
Subwatershed: Fifteenmile Creek

ANALYSIS AREA OWNERSHIP:
Fifteenmile Creek subwatershed

BLM - 830 acres (8%); USFS - 300 acres (3%); DNR - 3,200 acres (32%); Private 5,670 acres (57%). Total area contained within the Fifteenmile Creek subwatershed = 10,000 acres. Approximately 235 acres (3%) of the subwatershed will be affected by harvest activity.

ROAD DENSITIES:
Presale: 2.5* mi/sq mi within the Fifteenmile Creek subwatershed. *Figure based on 1980 aerial photos.

During the sale: 2.7 mi/sq mi within the Fifteenmile Creek subwatershed. Reflects 2.0 miles of new construction.

Postsale: 2.4 mi/sq mi within the Fifteenmile Creek subwatershed. This figure is based on the closure of the existing access road and loop road by recontouring access points. A gate will also be installed to limit access on the remaining *1.0 mile of new construction on an as needed basis. *This road was not included as a closed road in postsale road density calculations.

LISTED SPECIES CONSIDERED:

Bald eagle - habitat not affected
Gray wolf - habitat present, ungulate prey base present
Grizzly bear - habitat present

SPOKANE DISTRICT BUREAU OF LAND MANAGEMENT
BORDER RESOURCE AREA
MINERAL MOUNTAIN TIMBER SALE
BIOLOGICAL EVALUATION
12/16/94

I. INTRODUCTION

The Mineral Mountain Timber Sale (MMTS) was originally proposed in 1992. At that time there was no new road construction planned which would remain open after completion of the sale. Harvest activity was originally proposed which would not alter thermal cover in stands of 60% canopy cover or greater and was therefore not expected to affect deer winter range. At that time a "no effect" biological evaluation (BE) for the proposed action was completed for the gray wolf, grizzly bear and bald eagle.

In 1994 a new access route was designed which would reduce the amount of sediment transported to Fifteenmile Creek and provide a more stable road bed and safer access. The new access route also improves seclusion factors and lowers the likelihood road/human related mortality to ungulates. A portion of this new route would remain open postsale. New technology was also developed which allowed for the commercial harvest of smaller diameter trees in densely stocked stands which resulted in the addition of special yarding units totalling 105 acres. A portion of the special yarding units would result in the reduction of thermal cover in stands with 20-60% canopy cover or greater and possibly impact deer winter range.

As a result of the changes in the original sale proposal, technical assistance was requested from the Fish and Wildlife Service (FWS) and a field inspection conducted in August of 1994. The direction provided to BLM by the FWS was to minimize impacts to ungulate habitat, especially winter range, and reduce open road densities wherever possible. A revised BE resulted in a "may affect" determination being made and the initiation of informal consultation under section 7 of the ESA.

In an effort to avoid reiterating baseline biological information, it is appropriate to cite the BE completed in 1992 for the Elbow Timber Sale Project by the Kettle Falls Ranger District, Colville National Forest. The BE for the Elbow Timber Sale Project involves a similar action located within 10 miles of the proposed MMTS. A no effect determination was made for the bald eagle (threatened) and a not likely to adversely affect determination was made for the gray wolf (endangered) and grizzly bear (threatened). These determinations were concurred with by the Fish and Wildlife Service. A copy of EA #OR130-04-18 for the Mineral Mountain Timber Sale

completed by the Border Resource Area, Spokane District (1994) is also provided as a source of more detailed background information concerning the proposed action.

II. PROPOSED ACTION

The proposed MMTS involves the harvest of approximately 2.35 MMBF of commercial timber from 235 acres of public land in northern Stevens County (MMTS EA pg 3). A total of 830 acres of public land administered by the BLM which supports an estimated 10 MMBF of standing timber is located within the Fifteenmile Creek analysis area. Approximately 24% of the standing timber volume located on public land will be harvested as a result of the proposed action.

Over the past 70 years, approximately 75% of the Fifteenmile Creek drainage has been harvested, most recently in 1992 (MMTS EA pg 1). It is possible that if Boise Cascade successfully bids on the MMTS that additional harvest will occur on adjacent Boise Cascade lands. No other additional harvest activity within the Fifteenmile Creek subwatershed is likely to occur in the near future based on the best available information.

III. ANALYSIS

A. Factors Affecting Listed Species

Road densities:

Road densities in excess of 1.5 mi/sq mi. may limit the use of areas by gray wolves and grizzly bears. Road density within the analysis area currently exceeds 1.5 mi./sq. mi.. No increase in open road density is anticipated within the analysis area beyond the life of the timber sale. Therefore, no decline in habitat quality is anticipated due to increased road densities.

Presale/Existing: 2.5* mi/sq mi within the Fifteenmile Creek subwatershed (See EA Exhibit 3). *Figure based on 1980 aerial photos. Existing road use is concentrated on this road system during the fall hunting season for a period of 2-4 weeks (MMTS EA pg. 12). Winter access is nearly impossible, except by snow machine, during winter stress periods for ungulate populations.
During the sale: 2.7 mi/sq mi within the Fifteenmile Creek subwatershed (See EA Exhibit 3). Reflects 2.0 miles of new construction.

Postsale: 2.4 mi/sq mi within the Fifteenmile Creek subwatershed (See EA Exhibit 4). This figure is based on the closure of an existing loop road and access route by recontouring access points. Additional access control will be provided by the use of a gate on the remaining 1.0 mile of new construction. Access road relocation will also improve seclusion factors.

A further reduction in road density is expected to occur in the area based on a memo received from the Colville National Forest in August of 1994 which proposes additional road closures four miles north of the action area. One of the proposed road closures was constructed by the Forest Service in the summer of 1994 which eliminates access to the sale area from the north (See EA Exhibit 4).
Prey base (Ungulates):

Ungulates, primarily deer, comprise from 90-100% of the gray wolves diet depending on the time of year. Modifications to deer winter range which may result in a reduction in deer numbers could potentially limit the gray wolves ability to successfully hunt during the winter months. No significant reduction in deer winter range is anticipated as a result of the proposed action.

Ungulate (deer) habitat within the project area is currently unclassified in the most recent series of Priority Habitats and Species (PHS) maps available from the Washington Department of Fish and Wildlife (WDFW). However, a letter concerning this project received from Al Palmanteer, Area Habitat Biologist for WDFW, classifies the area as "important" mule deer winter range. Important, in this context, is commensurate with regular large concentrations (RLC) defined in the PHS system according to John Andrews, Region One Wildlife Biologist for WDFW. This designation is also supported by Chris Loggers, Wildlife Biologist for the Kettle Falls Ranger District. The Fifteenmile Creek drainage is included as part of a larger area designated as a deer winter range emphasis area (MA-8) by the Colville National Forest.

Approximately 105 acres of the MMTS is composed of special yarding units (See EA Exhibit 5) which were identified as areas which may provide winter thermal cover for deer (20-60% canopy cover). Surveys of these areas during August of 1993 and September of 1994 did not indicate that they were being heavily used by deer at any time of the year. Some indication of light use was found on approximately 30% of the area surveyed. There were no well defined trail networks, no large concentrations of pellet groups or browse line development on understory shrubs typical of moderate to heavy deer use. These special yarding units will be commercially thinned as part of the proposed action. Post harvest canopy cover will range between 10 - 40 %. It is not anticipated that this will have a significant longterm impacts on ungulate populations during winter stress periods. It is important to consider that only 24% of the total standing timber volume on public land will be harvested and that 69% of the public land will remain in its existing condition. Therefore, sufficient areas of thermal cover will remain after harvest to support existing deer populations and provide hunting opportunities for gray wolves should they occur within the project area.

B. Listed Species:

Bald eagle: The Upper Columbia River corridor, Lake Roosevelt, receives year round use by bald eagles. The project area is located a minimum of 2.6 miles from Lake Roosevelt. In 1994 there was an successful nest in the China Bend area

approximately 4.2 miles southeast of the project area (Eames, personal comm 1994). Since the project will not involve the modification of any habitat potentially used by the bald eagle or their primary prey base (fish and waterfowl) , the proposed action will have no effect on bald eagles or their critical habitat.

Grizzly bear: The proposed action is occurring outside of designated recovery areas and does not involve habitat proposed as critical or identified as a linkage habitat between the Selkirk Recovery area and proposed North Cascades recovery area. According to the Grizzly Bear Recovery Plan, the project area falls into Management Situation #5, which states that grizzly bears will be protected if located, but is not being managed as grizzly bear habitat. There have been no confirmed grizzly bear sightings in the action area (Whalen, personal comm 1994). It is possible, but not probable that grizzly bears may occasionally occur in this area based on existing habitat conditions. Since road densities will decrease slightly as a result of the proposed action, a determination of may affect but not likely to adversely affect was made for the grizzly bear and its essential habitat.

Gray wolf: The proposed action is occurring outside of designated recovery areas and does not involve habitat proposed as critical or identified as linkage habitat between recovery areas. This area is not being specifically managed as wolf habitat under the Northern Rocky Mountain Recovery Plan, but individual wolves would still be protected if located. No confirmed wolf sightings have been made in the vicinity of the project area (Whalen, personal comm 1994). Recent howling surveys conducted by Mitch Wainwright of the Republic Ranger District (Sept 94) in the Lone Ranch Creek drainage (T. 40 N., R. 39 E.) and those conducted in By the Kettle Falls Ranger District in the Elbow Planning Area have failed to produce any positive responses to date. Since overall road densities will decrease slightly, and it is not anticipated that ungulate populations will be significantly impacted as a result of this action, the proposed action may affect but is not likely to adversely affect gray wolves or their essential habitat.

PERSONS/AGENCIES CONSULTED

Michelle Eames - USFWS, Spokane Ecological Services Office
Al Palmanteer - WDFW, Region One
John Andrews - WDFW, Region One
John Whalen - WDFW, Region One
Chris Loggers - USFS, Kettle Falls Ranger District
Mitch Wainwright - USFS, Republic Ranger District

Prepared by:

Todd Thompson
Wildlife Biologist

Appendix C

Form 5450-3
(July 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

No. TS

CONTRACT FOR THE SALE OF TIMBER
LUMP SUM SALE

THIS CONTRACT is made and entered into the day of , 19 , under the authority of the Act of August 28, 1937, (50 Stat. 874), as amended, (43 U.S.C. 1181a-f), relating to the revested Oregon and California Railroad and reconveyed Coos Bay Wagon Road grant lands, or under the Act of July 31, 1947, (61 Stat. 681), as amended, (30 U.S.C. Secs. 601-604), relating to other lands under the jurisdiction of the Bureau of Land Management, and the regulations as set forth in 43 CFR Group 5400, between the UNITED STATES OF AMERICA, hereinafter called the Government, acting through the Bureau of Land Management, and

of

hereinafter called the Purchaser.
WITNESSETH, That the parties hereto do mutually agree as follows:

Sec. 1. *Timber Sold.* The Government hereby sells to the Purchaser and the Purchaser hereby buys from the Government, under the terms and conditions of this contract, all timber, except that reserved to the Government under Sec. 40 of this contract, within the area designated by the Government, comprising contract area* and situated in the County of , State of , and described as follows:

TOWNSHIP	RANGE	SECTION	SUBDIVISION(s)

Sec. 2. Total Purchase Price — Purchaser agrees to pay Government, as the total purchase price for the timber sold hereunder, the sum of

dollars
($); *Provided, however,* that such total purchase price may be adjusted in accordance with Secs. 6, 7, 8, 9, 19, 20, or 41 of this contract.

Sec. 3. Payment

(a) Payment under this contract shall be made as set forth in this section. No timber may be cut or removed until the required payments have been made. Purchaser shall continue to make such payments until the total purchase price has been paid. The total purchase price shall be paid no later than the expiration of time for cutting and removal as set forth in Sec. 4.

(b) Unless total purchase price is paid on or before the date this contract is signed by the Contracting Officer, payments shall be made in installments of not less than

dollars ($)

as follows: (1) The first installment shall be paid on or before the date this contract is signed by the Contracting Officer, one half of this first installment may be applied as payment on the total purchase price when (i) no less than 60 percent of the total purchase price has been paid or (ii) road construction required under the contract has been completed the value of which when combined with contract payments is equal to no less than 60 percent of the total purchase price, and one half of this first installment shall be held to satisfy the final payment due under this contract; (2) except as provided by subsections (c) and (d) of this section, a second installment shall be paid prior to cutting or removal of any timber sold under this contract. Each subsequent installment shall be due and payable without notice when the value of the timber cut or removed equals the sum of all payments not including the first installment or one-half of the first installment after one-half of the first installment has been released as provided in § (b) (1) of this section; (3) Provided, however, that in the case of all contracts with a 19-month or longer term, the Purchaser shall be required by the first anniversary date to either (i) pay no less than 20 percent of the total purchase price or (ii) complete road construction required under the contract the value of which when combined with contract payments is equal to no less than 20 percent of the total purchase price: (4) provided further, that in the case of contracts with a 27-month or longer term, the Purchaser shall also be required by the second anniversary date to either (i) pay no less than 40 percent of the total purchase price or (ii) complete road construction required under the contract the value of which when combined with contract payments is equal to no less than 40 percent of the total purchase price.

(c) If Purchaser increases its performance bond as permitted by Sec. 38(b), cutting of timber of a value not in excess of the increase in value of such bond may be permitted prior to the payment of the second installment or subsequent installments: *Provided, however,* that no timber may be skidded or yarded to a loading point or removed from the contract area prior to payment of any installment which, but for provisions of this subsection, would otherwise be due under the provisions of Sec. 3(b).

(d) If Purchaser provides a payment bond, as permitted by Sec. 38(d), cutting and/or removal of timber of a value not in excess of the penal sum of such bond may be permitted prior to the payment of the second installment or subsequent installments. Unless a shorter period is agreed to by Purchaser and Government, Government shall bill Purchaser monthly for timber skidded or yarded to a loading point or removed from the contract area. Such billing shall include any amount due for related road maintenance fees. Purchaser shall make payment within fifteen (15) days of the billing date shown on the billing form.

*General location of contract area is shown on map marked Exhibit A which is attached hereto and made a part hereof.

(e) For the purpose of determining (1) when payments are due or (2) the value of timber subject to any special bonding provisions, Government shall calculate the value of timber in accordance with the provisions of Exhibit B, which is attached hereto and made a part hereof.

(f) If the time specified for cutting and removal expires or the contract is cancelled, credit against the purchase price will be determined pursuant to Sec. 11. The Government will then bill the Purchaser for the amount due, payable within fifteen (15) days of the demand for damages.

(g) Purchaser shall make all payments at a depository as designated by the Contracting Officer in cash, by money order, bank draft, check or electronic transfer made payable to the Department of the Interior — BLM.

(h) For any payments or other charge not paid when due, interest shall accrue on the amount due at the interest rate published quarterly by the Department of the Treasury in TFRM 6-8020-20, beginning fifteen (15) calendar days after the billing date shown on the billing form. If payment has not been received within ninety (90) days from the date the payment was due from the Purchaser, administrative handling charges, administrative penalties and penalty interest shall be assessed in accordance with the Debt Collection Act of 1982 (96 Stat. 1749) or any amendment thereof.

Sec. 4. Time for Cutting and Removal — Except as otherwise provided in this contract, Purchaser may begin cutting and removing timber sold under this contract on the date this contract is signed by the Contracting Officer. Purchaser's right to cut and remove such timber shall expire ( ) months after such date; *Provided, however*, extensions of time may be granted as provided in Sec. 9.

Sec. 5. Definitions

(a) *Contracting Officer* — The Bureau of Land Management official who would have authority to execute this contract and delegate authority to take action in connection with this contract.

(b) *Authorized Officer* — Any employee of the Bureau of Land Management to whom has been delegated authority to take action in connection with this contract.

(c) *Timber* — standing trees, downed trees, logs, or portions thereof, which are capable of being measured in board feet.

(d) *Loading point* — any landing or other area in which logs are capable of being loaded for transportation out of the contract area; *Provided, however*, that right-of-way timber which has been cut shall not be considered to be at a loading point until such time as logs from the right-of-way are actually transported from that portion of the right-of-way.

Sec. 6. Inspection of Timber and Disclaimer of Warranty

(a) Purchaser warrants that this contract is accepted and executed on the basis of its examination and inspection of the timber sold under this contract and its opinion of the value thereof.

(b) Government expressly disclaims any warranty of fitness of the timber for any purpose; all timber sold hereunder is accepted *As Is* without any warranty of merchantability by Government. Any warranty as to the quantity or quality of the timber sold hereunder is expressly disclaimed by Government. Refund to or recovery by Purchaser for failure of title to any timber sold hereunder shall not exceed the value of such timber computed at prices per unit for species involved as set forth in *Exhibit B*.

Sec. 7. Passage of Title and Risk of Loss — Title to timber sold under this contract shall remain in Government and shall not pass to Purchaser until such timber has been paid for and removed from the contract area. Unless cut timber is sold under this contract risk of loss shall be borne by Purchaser after the timber is cut; *Provided, however*, that if loss results from a fire which was not caused by Purchaser, his contractors, subcontractors, or the employees of any of them, the risk of loss shall be borne by the party holding title. If cut timber is sold under this contract, risk of loss shall be borne by the party holding title. Risk of loss to Government shall not exceed the value of such timber computed at the prices per unit for the species involved as set forth in *Exhibit B*. Nothing herein shall be construed to relieve either party from liability for any breach of contract or any wrongful or negligent act. As used in this section, the term *cut timber* refers only to timber which has been felled, bucked, or otherwise severed by direct human activity prior to the date this contract was entered into.

Sec. 8. Sales of Additional Timber — If the Authorized Officer and Purchaser agree that additional timber should be removed and the Authorized Officer determines that the sale will not be detrimental to the interests of Government and is within the provisions of 43 CFR 5402.0-6, the Authorized Officer shall grant written permission to Purchaser to cut and remove such timber. If permission is granted, Purchaser shall pay for such timber at a price determined by the Authorized Officer in accordance with the Bureau of Land Management prescribed procedures. The value of such timber shall be added to total purchase price in Sec. 2. Payment for such timber shall be made in accordance with Sec. 3(b) or 3(d), except that, if all contract payments required by Sec. 3(b) or 3(d) have been made, payment for such timber shall be made in advance as a condition of granting such permission.

Sec. 9. Extension of Time and Reappraisal — If Purchaser shows that delay in cutting and removal was due to causes beyond his control and without his fault or negligence, the Contracting Officer may grant an extension of time, not to exceed one year, upon written request of Purchaser. Such written request shall be filed with the Authorized Officer prior to the expiration of the time for cutting and removal expressed in Sec. 4. If an extension of time is granted, as provided in this section, except as provided by 43 CFR 5473.1, timber remaining on contract area shall be reappraised by the Authorized Officer, using Bureau of Land Management prescribed procedures, and the total purchase price adjusted accordingly; *Provided, however*, no adjustment shall be made by reason of timber being enhanced in value by Purchaser, nor shall the reappraised total purchase price be less than the total purchase price in effect during the original time for cutting and removal or the last extension. The Contracting Officer may require that the reappraised total purchase price shall be paid in advance as a condition of granting an extension. Market fluctuations shall not be cause for consideration of contract extensions.

Sec. 10. Violations, Suspension, and Cancellation

(a) If Purchaser violates any provision of this contract, the Contracting Officer may, by written notice, suspend any further operations of Purchaser under this contract, except such operations as may be necessary to remedy the violation. If Purchaser fails to remedy the violation within thirty (30) days after receipt of a suspension notice, the Contracting Officer may, by written notice, cancel the rights of the Purchaser under this contract and take appropriate action to recover all damages suffered by Government by reason of such violation, including application toward payment of such damages of any advance payments and any performance bonds or, where applicable, any payment bonds; *Provided, however*, that if the violation involves nonpayment of amounts due for timber cut and/or removed under a payment bond of a corporate surety, the Contracting Officer must, in addition to the above requirements, allow sixty (60) days after making demand upon surety for any payment due before cancelling the rights of Purchaser.

(b) If Purchaser cuts or removes any timber sold under this contract during any period of suspension, such cutting or removal shall be considered a willful trespass and render Purchaser liable for damages under applicable law. For purposes of determining damages under this section, the value of the trespass timber shall be based upon the fair market value of the particular timber cut or removed at the time of trespass. Any payment made for purchase price of timber cut or removed in trespass shall be deducted to the extent of single damages or the value of timber under this contract, whichever is lesser, from amount due because of trespass.

(c) If Purchaser's operations are suspended because of Purchaser's failure to make an installment payment when due, the Contracting Officer may require Purchaser to pay the entire remaining balance of the purchase price or any portion thereof as a condition of terminating the suspension.

(d) In the event timber is entirely removed or the time for cutting and removal has passed the required suspension notice will not be issued.

(e) If Purchaser, his contractors, subcontractors, or the employees of any of them, cuts, injures, or removes any Government timber reserved under this contract, they shall fully cooperate, upon request of the Authorized Officer, in the investigation of such acts. If in the opinion of the Contracting Officer, full cooperation is not received or will not be forthcoming, he may suspend that portion of Purchaser's operations necessary to preserve evidence pending investigation or permit safe investigation of such acts.

Sec. 11. Credit Against Purchase Price — If the time specified for cutting and removal of timber has expired or the rights of Purchaser have been cancelled, Purchaser shall be entitled to a credit against any amount which is due and owing Government for timber remaining on the contract area. The Contracting Officer shall determine the credit value of the remaining timber as soon as possible after the date of expiration or cancellation. Credit value of the remaining timber shall be total market value as established by the Contracting Officer by reappraisal or resale, or total value based upon contract unit prices, whichever is less. There shall be deducted from credit value such amounts as the Contracting Officer determines adequate to cover costs to Government resulting from Purchaser's failure to perform, including but not limited to costs of appraising and administering any resale of timber.

Sec. 12. Hold Harmless and Responsibility for Damages to the Government — Purchaser agrees to hold the Government harmless from any claim for damage or loss of property, personal injury, or death and to be liable for any damage suffered, cost, or expense incurred by the Government which claim, damage, cost or expense arise out of any operations under this contract and result from any breach of contract or wrongful or negligent act or omission of Purchaser, its contractors, subcontractors or employees of any of them. Purchaser shall pay Government for such damages after written demand therefor by the Contracting Officer.

Sec. 13. Timber Trespass — If in connection with operations hereunder Purchaser, his contractors, subcontractors, or the employees of any of them, cuts, injures, or removes any Government timber, other than timber sold under this contract, Purchaser shall be liable for damages under applicable law. Purchaser shall pay Government for such damages after written demand therefor by the Contracting Officer.

Sec. 14. Protection of Roads, Utilities and Improvements — Existing telephone, telegraph and transmission lines, fences, ditches, roads, trails, and other improvements shall be protected as far as practicable in all phases of Purchaser's construction or logging operations. All such roads and ditches shall be kept free of logs, slash, and debris. Damage to roads, utilities and improvements shall be promptly paid for or repaired to a condition which, in the opinion of the Authorized Officer, is at least as good as the condition just prior to such damage.

Sec. 15. Fire Prevention and Slash Disposal — Purchaser shall take such measures for prevention and suppression of fire on the contract area and other adjacent Government lands used or traversed by Purchaser in connection with operations as are required by applicable laws and regulations. *However*, when in the opinion of the Authorized Officer, weather and other conditions affecting fire incidence and control make special precautions necessary to protect the contract area and said Government lands, Purchaser shall take such additional or other fire prevention and control measures as may be required by the Authorized Officer. Disposal of slash shall be done in accordance with a plan approved by the Authorized Officer or as provided in Section 41.

Sec. 16. Construction, Use and Maintenance of Roads and Facilities

(a) Subject to the written approval of and regulation by the Contracting Officer, Purchaser may: (1) construct and use any new roads and facilities not otherwise provided for in this contract, and (2) use any existing roads and facilities not otherwise provided for in this contract.

(b) Except as provided in Sec. 12, Purchaser shall perform or pay for repair and maintenance of any road or facility used under the terms of this contract in accordance with the requirements of Sec. 41; *Provided, however*, that Purchaser shall not be responsible for maintenance or repair of wear or damage caused by third parties, or maintenance or repair which exceeds the standards of required maintenance shown in Sec. 41; and *Provided, further*, that Purchaser's responsibility under this provision shall not commence prior to the date on which he first begins operations and shall cease upon completion and written acceptance of all contract requirements other than slash disposal, except for maintenance and repair of damages resulting from Purchaser's slash disposal activities.

Sec. 17. Limitations of Road Use

(a) Purchaser's right under this contract to use existing Government roads described herein, or roads to be constructed, is limited to removal of timber sold under this contract; *Provided, however*, that this provision shall not limit any right to use Government roads or rights-of-way which have been granted to Purchaser pursuant to 43 CFR Group 2800.

(b) For the purpose of protecting roads described herein, Purchaser shall immediately discontinue use of said roads upon receipt of written notice that the Authorized Officer has determined that continued use will cause excessive damage to said roads.

Sec. 18. Acceptance of Road Construction

(a) Whenever Purchaser shall deliver to the Authorized Officer a written statement that the road construction is complete, pursuant to the contract terms, the Authorized Officer shall promptly inspect such road. If the contract road construction requirements have been completed to the satisfaction of the Contracting Officer, Purchaser will be given written notice of acceptance, and, except as provided in Sec. 12, be released from further liability or duty for construction or reconstruction of such road.

(b) Notwithstanding acceptance of any road under this section, Purchaser shall remain liable for maintenance and repair of any such road in accordance with the provisions of Sec. 16.

Sec. 19. Cost Adjustment for Physical Changes — If, prior to acceptance of a road under Sec. 18, a major physical change, caused by a single event, and not due to negligence of Purchaser, his contractors, subcontractors, or the employees of any of them, results in additional work by Purchaser involving an additional estimated cost of more than (1) $1,000 for sales under one million board feet; (2) $1.00 per thousand board feet for sale of one to three million board feet; or (3) $3,000 for sales over three million board feet, Government shall become responsible for any estimated cost which exceeds the above amounts. Government may elect to meet its share by reducing the purchase price or by payment of such cost to Purchaser or by performing its share of the necessary work. The estimated cost of additional work shall be calculated by the Authorized Officer using Bureau of Land Management prescribed appraisal procedures. Such cost shall include the cumulative estimated costs of repairing damage from slides, washouts, landslips, fire, etc. caused by said event. If necessary, plans and specifications shall be revised to meet the new conditions. Purchaser must obtain advance approval from the Contracting Officer for such additional work in order for Purchaser to be eligible for cost adjustment under this section.

Sec. 20. Design Change — If the Purchaser requests and the Contracting Officer agrees to a design change of a substantial nature to any road, road structure or bridge required to be constructed or improved under the terms of this contract or, in the absence of such a request, the Contracting Officer determines that a design change of a substantial nature is needed, the total purchase price shall be revised to reflect the estimated increase or decrease in cost from such design change. A design change of a substantial nature is one that would result in a cost adjustment of $1,000 or more.

Sec. 21. Rights and Obligations After Time for Removal of Personal Property or Cancellation of the Rights of the Purchaser — If any of Purchaser's obligations remain unperformed after expiration of the time for removal of personal property, as set forth in Sec. 39, or if the rights of Purchaser under this contract have been cancelled by Government, all provisions of this contract for the benefit and protection of Government or third parties shall remain in effect until this contract is terminated in its entirety by Government.

Sec. 22. Protection of Survey Monuments, Witness Corners, Reference Monuments, and Bearing Trees — Purchaser shall protect all survey monuments, witness corners, reference monuments, and bearing trees against destruction, obliteration, or damage during operations on the contract area. If any monuments, corners, or accessories are destroyed, obliterated, or damaged by such operations, Purchaser shall hire an appropriate county surveyor or registered land surveyor to reestablish or restore the monuments, corners, or accessories, at the same location, using surveying procedures in accordance with the *Manual of Instructions for the Survey of the Public Lands of the United States*, and shall record such survey in appropriate county records. The Authorized Officer may prescribe in writing additional requirements for protection of monuments, corners, and bearing trees.

Sec. 23. Purchaser's Representative — At all times when operations are in progress under this contract, Purchaser shall have a representative readily available on the contract area who shall be authorized to receive, in behalf of Purchaser, any notices or instructions from the Authorized Officer in regard to performance under this contract. Purchaser shall take such action as required by the terms of this contract.

Sec. 24. Simultaneous Use of Contract Area by Others — The simultaneous use of the contract area by others may be authorized by the BLM through issuance of permits, leases, or contracts, provided that the Authorized Officer first determines that such use of the contract area will not seriously interfere with the operations of the Purchaser.

Sec. 25. Watershed Protection: Water Quality, Erosion Control, and Soil Damage

(a) Purchaser shall comply with all applicable State and Federal laws and regulations pertaining to water quality in connection with any operations under this contract.

(b) Purchaser shall take every reasonable precaution not to pollute or obstruct any stream, lake, or reservoir on or near the contract area in connection with any operations under this contract. If Purchaser's operations cause pollution or obstruction of any stream, lake, or reservoir on or near the contract area, Purchaser shall correct the condition to the satisfaction of the Authorized Officer.

(c) Purchaser shall undertake every reasonable measure to minimize erosion and soil damage in connection with any operations under this contract, including but not limited to construction of water bars on yarding and spur roads as designated by the Authorized Officer. Purchaser shall immediately discontinue any construction or timber harvesting operations under this contract, upon receipt of written notice from the Authorized Officer that due to weather or soil moisture conditions, such operations will cause excessive damage to the soil. The Authorized Officer shall notify Purchaser, in writing, when such operations may be resumed.

Sec. 26. Refuse Control and Disposition of Waste Materials

(a) Purchaser shall, to the satisfaction of the Authorized Officer, remove, or otherwise dispose of all garbage, temporary buildings, trash, litter, discarded equipment or parts, waste materials or other refuse resulting from Purchaser's operations. Areas for disposal of waste material shall be subject to approval of the Authorized Officer.

(b) Waste materials, such as garbage, trash, oil, grease, chemicals and similar substances shall be disposed of in a manner that will prevent their entry by drainage, high water, or other means into any river, watercourse, lake, or reservoir in or near Purchaser's operations. Water used to wash down equipment used for petroleum products, industrial chemicals, cement or other toxic materials shall be disposed of in a manner that will prevent their entry into any watercourse or waterway.

Sec. 27. Storage and Handling of Hazardous Materials — All petroleum products, industrial chemicals and similar toxic or volatile materials stored by Purchaser on or near the contract area, in connection with operations under this contract, shall be stored in durable containers and shall be stored in areas, as determined by the Authorized Officer, which are either located so that any accidental spillage will not drain into any watercourses, lakes, or reservoirs or, when such areas are not available, shall be stored in an area surrounded by impermeable containment dikes of sufficient capacity to contain the aggregate capacity of all tanks.

In addition, Purchaser shall comply with all applicable State and Federal laws and regulations concerning the storage, handling, use and disposal of industrial chemicals, pesticides, herbicides, and other hazardous substances.

Sec. 28. Safety and Health — Purchaser shall conduct all operations in connection with this contract in compliance with the applicable provisions of Federal, State, and local safety, health and sanitation laws, codes, and regulations and shall make it possible for the Authorized Officer to inspect such operations.

Sec. 29. Equal Opportunity — The Purchaser will comply with all provisions of Executive Order No. 11246 of September 24, 1965, as amended, and of the rules, regulations, and relevant orders of the Secretary of Labor.

Sec. 30. Records and Reports — Upon request of the Authorized Officer, Purchaser shall furnish the following records and reports: (1) volume or quantity of timber cut and removed from the contract area; (2) road costs including road use fees paid in connection with removing timber from the contract area; and (3) prices received for lumber or other wood products.

Sec. 31. Unsatisfactory Bond — Whenever any performance or payment bond furnished under this contract becomes unsatisfactory to the Contracting Officer, he may require a new bond which is satisfactory to him.

Sec. 32. Assignments

(a) Purchaser may not assign this contract or any interest therein without written approval of the Contracting Officer. An assignment shall contain all the terms and conditions agreed upon by the parties thereto.

(b) The Contracting Officer will not approve any assignment involving contract performance unless assignee: (1) is authorized to transact business in the State indicated in Sec. 1; (2) submits such information as is necessary to assure the Contracting Officer of his ability to fulfill the contract; and (3) furnishes a performance bond as required by Sec. 38 or obtains a commitment from the previous surety to be bound by the assignment when approved.

Sec. 33. Contingent Fees — Purchaser warrants that no person or agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee excepting bona fide employees or bona fide established commercial agencies maintained by Purchaser for the purpose of securing business. For breach or violation of this warranty, Government shall have the right to cancel this contract without liability or, in its discretion, to require Purchaser to pay, in addition to the contract price or consideration, the full amount of such commission, percentage, brokerage, or contingent fee.

Sec. 34. Successors in Interest — Every obligation hereunder shall extend to and be binding upon the successors in interest of the parties hereto and every benefit hereunder shall inure to such successors.

Sec. 35. Exercise of Rights or Duties of the Authorized Officer — The rights or duties of the Authorized Officer may be exercised by the Contracting Officer or his designated representative.

Sec. 36. Officials Not to Benefit — No Member of, or Delegate to Congress, or Resident Commissioner, after his election or appointment, or either before or after he has qualified and during his continuance in office, and no officer, agent, or employee of the Department of the Interior, except as provided in 43 CFR (20 735-24) shall be admitted to any share or part in this contract or derive any benefit that may arise therefrom; and the provisions of Section 3741 of the Revised Statutes of the United States, as amended (41 U.S.C. Sec. 22), and Sections 431, 432, and 433, Title 18 U.S.C., relating to contracts, enter into and form a part of this contract so far as the same may be applicable.

Sec. 37. Disputes

(a) This contract is subject to the Contract Disputes Act of 1978 (41 U.S.C. 601, et seq.). If a dispute arises relating to the contract, the Purchaser may submit a claim to the Contracting Officer who shall issue a written decision on the dispute in the manner specified in DAR 1-314 (FPR 1-1.38).

(b) *"Claim"* means:

(1) A written request submitted to the Contracting Officer;

(2) For payment of money, adjustment of contract terms, or other relief;

(3) Which is in dispute or remains unresolved after a reasonable time for its review and disposition by the Government; and

(4) For which a Contracting Officer's decision is demanded.

(c) In the case of disputed requests or amendments to such requests for payment exceeding $50,000, or with any amendment causing the total request in dispute to exceed $50,000, the Purchaser shall certify, at the time of submission as a claim, as follows:

I certify that the claim is made in good faith, that the supporting data are accurate and complete to the best of my knowledge and belief; and that the amount requested accurately reflects the contract adjustment for which the Purchaser believes the Government is liable.

(Purchaser's Name)
(Title)

(d) The Government shall pay the Purchaser interest:

(1) On the amount found due on claims submitted under this clause:

(2) At the rates fixed by the Secretary of the Treasury, under the Renegotiation Act, Public Law 92-41;

(3) From the date the Contracting Officer receives the claim, until the Government makes payment.

(e) The decision of the Contracting Officer shall be final and conclusive and not subject to review by any forum, tribunal, or Government agency unless an appeal or action is timely commenced within the times specified by the Contract Disputes Act of 1978.

(f) Except as the parties may otherwise agree, pending final resolution of a claim of the contractor arising under the contract the contractor shall proceed diligently with the performance of the contract in accordance with the Contracting Officer's decision.

Sec. 38. Bond

(a) A performance bond shall be filed by Purchaser on or before the date this contract is signed by the Contracting Officer in the amount of

dollars ($).

(b) If Purchaser elects to cut timber before payment of the second installment or subsequent installments, Purchaser shall increase the amount of the required performance bond by an amount equal to the second installment and one or more additional installments as set forth in Sec. 3(b). The adjusted bond must be approved, in writing, by the Contracting Officer prior to cutting any timber under the adjusted bond. The increased amount of bond shall be used to assure payment for such timber. Timber cut pursuant to this subsection may be paid for in installments. Upon payment, the increased amount of bond may be applied to other timber sold under this contract to permit its cutting in advance of payment.

(c) As contract provisions are completed to the satisfaction of the Contracting Officer, he may, in his discretion, reduce the amount of the performance bond required; *Provided, however*, the performance bond may not be reduced below the amount of

dollars ($)

until provision under Section 3(b)(1)(i) or 3(b)(1)(ii) have been completed. Further, the performance bond may not be reduced below the amount of

dollars ($)

until the total purchase price has been paid. The performance bond shall be forfeited to the amount of damages, determined by the Contracting Officer if all contract provisions are not faithfully and fully performed by Purchaser. If the amount of damages exceeds the amount of the bond, Purchaser hereby agrees to pay the excess. Upon satisfactory performance of all provisions of this contract, the bond shall be cancelled or, if cash or negotiable securities are furnished in lieu of a performance bond, such cash or negotiable securities shall be returned to Purchaser. In event of litigation, any determination by the Contracting Officer as to the amount of damages will be subject to review by a court of competent jurisdiction.

(d) If Purchaser elects to: (1) cut and remove timber; (2) remove timber already cut which has been secured by an increased performance bond as provided in Sec. 38(b), before payment of the second installment or subsequent installments, Purchaser shall obtain a payment bond in an amount equal to the second installment and one or more additional installments as determined by the Authorized Officer. The payment bond must be approved, in writing, by the Contracting Officer prior to cutting or removing any timber under the bond. The amount of the bond shall be used to assure payment for such timber, *Provided, however*, that such bond shall be considered as payment under Sec. 7, for the purpose of passing title and risk of loss to timber sold. Timber cut pursuant to this subsection shall be paid for as provided in Sec. 3(d). Upon payment, the amount of the bond may be applied to other timber to permit its cutting and/or removal in advance of payment. If a bond of a corporate surety is used, it shall provide that if Purchaser fails to make payment as required by Sec. 3(d), the surety will make such payment including interest as specified in Sec. 3(h), to Government within sixty (60) days after demand by Government.

Sec. 39. Time for Removal of Personal Property — Purchaser shall have the right within ( ) months after expiration of time for cutting and removal to remove his equipment, improvements, or other personal property from Government lands or rights-of-way; *Provided, however*, that any improvements such as road surfacing, culverts and bridges which have become a permanent part of a Government road, shall not be removed. The Authorized Officer may, in his discretion, grant an extension of time, not to exceed three (3) months for removal of personal property. Any improvements remaining on Government lands and rights-of-way at the end of the period for removal, or any extension, shall become the property of Government. Any equipment or other personal property remaining on Government land and rights-of-way at the end of this period may be removed at the expense of Purchaser and disposed of in accordance with applicable law.

Sec. 40. Timber Reserved from Cutting — The following timber on this contract area is hereby reserved from cutting and removal under the terms of this contract and is retained as the property of Government.

Sec. 41. Special Provisions — Purchaser shall comply with the special provisions which are attached hereto and made part hereof unless otherwise authorized, in writing, by the Contracting Officer.

IN WITNESS WHEREOF, the parties hereto have executed this contract as of the day first above written.

If Individual or Partnership, sign here:

(Name of Firm)

(Name)

(Address)

(Name)

(Address)

(Name)

(Address)

If Corporation, sign here:

(Name of Corporation)

(Name)

(Title)

UNITED STATES OF AMERICA

By

(Name)

(Title)

(Date)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements or representation as to any matter within its jurisidiction.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) requires us to inform you that:

This information is being collected to obtain data relevant to the operation of this timber sale contract.
This information will be used to administer our timber sale program.
Response to this request is required to obtain a benefit.

(If Purchaser is a corporation, the following certificate must be executed by the Secretary or Assistant Secretary of the Corporation.)

I, , certify that I am the Secretary of the corporation named as Purchaser herein; that , who signed the contract was then of said corporation, that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

[CORPORATE SEAL]

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Form 1279–3
(June 1984)

BORROWER'S CARD

SD 436 .W2 B673 1995
U. S. Bureau of Land
Management. Border Resource
Mineral Mountain timber sale

DATE LOANED	BORROWER	OFFICE	DATE RETURNED

(Continued on reverse)

USDI – BLM

SD 436 .W2 B673 1995
U. S. Bureau of Land
Management. Border Resource
Mineral Mountain timber sale

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
SPOKANE DISTRICT OFFICE
Border Resource Area
1103 N. Fancher
Spokane, Washington 99212

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

FORWARDING AND ADDRESS
CORRECTION REQUESTED